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PAPERS AND PROCEEDINGS

of the

Fifty-eighth Annual Meeting

OF THE

AMERICAN ECONOMIC ASSOCIATION

Cleveland, Ohio, January 24-27, 1946

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PROGRAM OF THE FIFTY-EIGHTH ANNUAL MEETING OF THE AMERICAN ECONOMIC ASSOCIATION

Cleveland, Ohio, January 24–27, 1946

At the time of the spring meeting of the Executive Committee prospects for a national meeting were so discouraging (at the least, so uncertain) that no definite plans were adopted. Determination of time and place of meeting, with authority to cancel the annual meeting altogether, was left to the President and the Secretary. When the ban on conventions was lifted in September, it was decided to revive the canceled arrangements of 1942 at Cleveland.

We acted independently, however, and did not plan joint meetings with the other members of the social science group. At that late date it was not feasible to delay the preparation of our own program in order to explore the possibilities of such joint meetings; and there was also considerable sentiment among the membership that a separate meeting of the Association at this juncture would be salutary. After our plans were announced a number of organizations decided to meet at the same time and place. These included the American Statistical Association, the Institute of Mathematical Statistics, the American Finance Association, the Economic History Association, the Econometric Society, and the American Association of University Teachers of Insurance. A few sessions were arranged under joint sponsorship with the American Finance Association.

The dates chosen for the meetings were largely the result of circumstances beyond our control. The likelihood of extra-heavy pressure upon transport facilities and hotel accommodations during the Christmas holidays virtually limited our choice to the dates actually adopted. With the rather complicated university calendars which then prevailed—including not only semester and quarter systems but odd periods dictated by military programs—and with vacations sharply curtailed at many institutions, no dates would have fit all schedules. Since this was to be our first meeting on a national scale in four years, it was hoped that members would decide to attend even though it might mean coming on "company time."

The program was arranged by President I. L. Sharfman, with the assistance of key participants and Association committees in charge of some of the scheduled round tables. The order of papers as shown in the table of contents differs from the time schedule below, since in arranging the meetings an effort was made to avoid concurrent sessions on similar or related topics.

The disclaimer footnote which has so often appeared in recent years to the effect that "the views expressed are the writer's and do not necessarily reflect in any way those of" the public agency or institution with which the author is affiliated has been omitted. We hope that readers may take it for granted that no one but the author is responsible for the contents of his paper. In a few instances the writer of a paper was unavoidably absent on account of foreign assignment or sickness and his paper was read by another. Needless to say, the content of the paper still remained the author's responsibility. It may be added that the papers or reports represent the views of the person or persons actually signing rather than of the Association or any segment thereof.

Thursday, January 24, 1946

10:00 A.M. *Meeting of the Executive Committee*

8:00 P.M. *Round Table on the Problem of "Full Employment"*

Chairman: Major Paul H. Douglas, USMCR

Papers: Albert G. Hart, Committee for Economic Development; Alan R. Sweezy, Williams College; Sumner H. Slichter, Harvard University

Discussion: John H. G. Pierson, Department of Labor; William J. Fellner, University of California; Clark Warburton, Federal Deposit Insurance Corporation; Robert B. Bryce,* Department of Finance, Ottawa, Canada; Abba P. Lerner, New School for Social Research; Edwin E. Witte,* University of Wisconsin

Friday, January 25, 1946

9:30 A.M. 1. *The American Economy in the Interwar Period*

Chairman: Earl J. Hamilton, Northwestern University

Papers: Joseph A. Schumpeter, Harvard University; Arthur Smithies, Bureau of the Budget

Discussion: Alexander Sachs,* New York, New York; Garfield V. Cox, University of Chicago; Paul T. Homan,* Cornell University; Gardiner C. Means, Committee for Economic Development

* No manuscript received.

2. *Postwar Labor Relations*
Chairman: Isador Lubin, United States Commissioner of Labor Statistics
Papers: William M. Leiserson, Johns Hopkins University; Joseph Mire, American Federation of State, County, and Municipal Employees; Philip Taft, Brown University
Discussion: Herbert R. Northrup, New York University; Dexter M. Keezer, Department of Economics, McGraw-Hill Publishing Company; Charles W. Anrod, Loyola University; Mark Starr, International Ladies' Garment Workers' Union; Lloyd G. Reynolds, Yale University

3. *Round Table on Monetary Policy* (Joint session with American Finance Association)
Chairman: Benjamin H. Beckhart, Columbia University
Participants: Lawrence H. Seltzer, Wayne University; William E. Dunkman, White Plains, New York; Homer Jones, Federal Deposit Insurance Corporation; James G. Smith, Princeton University; Charles C. Abbott, Harvard University; Ernst W. Swanson, United States Chamber of Commerce; Roland I. Robinson, Board of Governors of the Federal Reserve System; Ragnar Nurkse, Institute for Advanced Study; Morris E. Garnsey, University of Colorado; Imrie de Vegh, New York, New York; Michael A. Heilperin, New York, New York; John Parke Young, Department of State; and James W. Bell, Northwestern University, Chairman of the *Ad Hoc* Committee on Monetary Policy

12:30 P.M. *Luncheon Meeting*
Chairman: Amos Taylor, Department of Commerce
Speaker: Calvin B. Hoover, Duke University
Subject: The Future of the German Economy

2:30 P.M. 1. *The Changing Structure of the American Economy*
Chairman: Robert D. Calkins, Columbia University
Papers: W. Blair Stewart, Reed College; Richard B. Heflebower, Brookings Institution; Lawrence H. Seltzer, Wayne University
Discussion: Glenn E. McLaughlin, War Production Board; Francis M. Boddy, University of Minnesota; Ewald T. Grether, University of California; Donald B. Woodward, Mutual Life Insurance Company of New York; Ralph A. Young, National Bureau of Economic Research

2. *Economic Problems of Foreign Areas*
Chairman: Winfield W. Riefler, Institute for Advanced Study
Papers: Carl F. Remer, University of Michigan; Frank M. Tamagna, Federal Reserve Bank of New York; Mary E. Murphy, Hunter College
Discussion: John D. Sumner, Department of State; Horace Belshaw, Institute of Pacific Relations; Warren S. Hunsberger, Department of State; Lloyd A. Metzler,* Board of Governors of the Federal Reserve System; Donald F. Heatherington, Department of Commerce

3. *Round Table on Publication of an Annual Review of Economics*
Chairman: Eveline M. Burns, Bryn Mawr College
Participants: Donald H. Wallace, Office of Price Administration; Edward S. Mason, Harvard University; Joseph S. Davis, Stanford University; Morris A. Copeland, National Bureau of Economic Research; Paul T. Homan, Cornell University; Albert B. Wolfe, Ohio State University; E. A. Goldenweiser, Institute for Advanced Study; Norman S. Buchanan, Twentieth Century Fund; Seymour E. Harris, Harvard University; Frederick C. Mills, Columbia University; Dickson H. Leavens, University of Chicago; Fritz Machlup, Office of Alien Property Custodian; Dexter M. Keezer, McGraw-Hill Publishing Company; Aryness Joy Wickens, Department of Labor; Joseph, J. Spengler, Duke University

8:00 P.M. *Presidential Address*
Chairman: Joseph S. Davis, Stanford University
I. L. Sharfman, American Economic Association

Saturday, January 26, 1946

9:30 A.M. 1. *New Frontiers in Economic Thought*
Chairman: Albert B. Wolfe, Ohio State University
Papers: Frank H. Knight, University of Chicago; Clarence E. Ayres, University of Texas; Ralph H. Blodgett, University of Illinois

* No manuscript received.

Discussion: Edward H. Chamberlin, Harvard University; David McCord Wright, University of Virginia; Victor Abramson, Office of Alien Property Custodian; Abram L. Harris, Howard University; John Kenneth Galbraith, Fortune Magazine

2. *Round Table on Postwar Shipping Policy*
Chairman: Samuel Duvall Schell, Executive Director of United States Maritime Commission and Executive Deputy Administrator of War Shipping Administration
Papers: Hobart S. Perry, United States Maritime Commission; Henry L. Deimel, Jr., Department of State; Daniel Marx, Jr., Dartmouth College
Discussion: G. Lloyd Wilson, University of Pennsylvania; Arthur Wubnig, Foreign Economic Administration; Robert H. Patchin, W. R. Grace and Company, New York, New York; Ralph H. Hallett, United States Maritime Commission; John G. B. Hutchins, Cornell University

3. *Round Table on Monopoly and Competition*
Chairman: Frank A. Fetter, Princeton, New Jersey
Papers: George P. Comer, Department of Justice; Corwin D. Edwards, Northwestern University; Mordecai Ezekiel, Department of Agriculture
Discussion: Thurman Arnold,* Washington, D. C.; Vernon A. Mund, University of Washington; Emerson P. Schmidt, United States Chamber of Commerce; Theodore O. Yntema,* Committee for Economic Development

4. *Postwar Tax Policy* (Joint session with American Finance Association)
Chairman: Neil Jacoby, University of Chicago
Papers: Harold M. Groves, University of Wisconsin; Alfred G. Buehler, University of Pennsylvania
Discussion: Paul Studenski,* New York University; Roy G. Blakey, University of Minnesota; Albert G. Hart,* Committee for Economic Development

12:30 P.M. *Luncheon Meeting* (Joint meeting with American Finance Association)
Chairman: John D. Clark, President, American Finance Association
Speaker: Beardsley Ruml, R. H. Macy and Company, New York, New York
Subject: Tax Policies for Prosperity

2:00 P.M. 1. *Postwar Railroad Problems*
Chairman: Eliot Jones, Stanford University
Papers: Ralph L. Dewey, Iowa State College; D. Philip Locklin, University of Illinois; Elmer A. Smith, Illinois Central System
Discussion: W. H. S. Stevens, Interstate Commerce Commission; Harold D. Koontz, Transcontinental and Western Air, Inc.; Edwin H. Burgess, Traffic Executive Association, Eastern Territory, New York, New York; Robert W. Harbeson, Interstate Commerce Commission; Irston R. Barnes, Civil Aeronautics Board; James C. Nelson, Department of Commerce

2. *Round Table on International Investment* (Joint session with American Finance Association)
Chairman: Frank D. Graham, Princeton University
Papers: Randall Hinshaw, Board of Governors of the Federal Reserve System; Hal B. Lary, Department of Commerce; Arthur I. Bloomfield, Federal Reserve Bank of New York
Discussion: Raymond F. Mikesell, University of Washington; J. J. Polak, United Nations Relief and Rehabilitation Administration; John Parke Young, Department of State

3. *Round Table on Agricultural Price Supports*
Chairman: F. E. Richter, General Foods Corporation, New York, New York
Papers: John D. Black,* Harvard University; Elmer J. Working,† University of Illinois
Discussion: Theodore W. Schultz,* University of Chicago; Helen C. Farnsworth, Stanford University; Oscar C. Stine,* Department of Agriculture; Theodore O. Yntema,* Committee for Economic Development

5:00 P.M. *Annual Business Meeting*

8:00 P.M. 1. *Recent Developments in Public Utility Regulation*
Chairman: Clyde O. Ruggles, Harvard University

* No manuscript received.
† For paper see report at Round Table on Economic Opinion.

Papers: Ben W. Lewis, Oberlin College; Nelson Lee Smith, Federal Power Commission; James C. Bonbright, Columbia University
Discussion: Clyde O. Fisher, Connecticut Public Utilities Commission; Archibald M. McIsaac, Princeton University; Edward W. Morehouse, New York, New York; Leslie T. Fournier, Securities and Exchange Commission; Martin G. Glaeser,* University of Wisconsin; Walton Seymour, Tennessee Valley Authority

2. *Round Table on International Cartels*
Chairman: Arthur R. Burns, Columbia University
Papers: Bernard F. Haley, Stanford University; Walton H. Hamilton, Yale University; Robert Terrill, Department of State
Discussion: Vincent W. Bladen, University of Toronto; Fritz Machlup, Office of Alien Property Custodian; Robert B. Schwenger, Department of Agriculture; Floyd L. Vaughan, University of Oklahoma

3. *Round Table on Economic Research*
Chairman: Donald H. Wallace, Office of Price Administration
Papers: Edwin G. Nourse, Brookings Institution; Saul Nelson, Civilian Production Administration; Harold B. Rowe, Brookings Institution
Discussion: Aryness Joy Wickens,* Department of Labor

Sunday, January 27, 1946

9:00 A.M. *Meeting of the Executive Committee*

10:00 A.M. *Round Table on Methods of Focusing Economic Opinion on Questions of Public Policy*
Chairman: Frederick C. Mills, Columbia University
Reports: James Washington Bell, Northwestern University; Elmer J. Working, University of Illinois; Corwin D. Edwards, Northwestern University
Discussion: Frank D. Graham,* Princeton University; Charles O. Hardy, Federal Reserve Bank of Kansas City

2:30 P.M. *Round Table on the Undergraduate Teaching of Economics*
Chairman: Horace Taylor, Columbia University
Discussion Leaders: Mabel Newcomer, Vassar College; Albert B. Wolfe, Ohio State University; Howard H. Preston,* University of Washington; William W. Hewett, University of Cincinnati; Mary Jean Bowman, Iowa State College; Joseph J. Spengler, Duke University

* No manuscript received.

THE purpose of the American Economic Association, according to its charter, is the encouragement of economic research, the issue of publications on economic subjects, and the encouragement of perfect freedom of economic discussion. The Association as such takes no partisan attitude, nor does it commit its members to any position on practical economic questions. It is the organ of no party, sect, or institution. Persons of all shades of economic opinion are found among its members, and widely different issues are given a hearing in its annual meetings and through its publications. The Association, therefore, assumes no responsibility for the opinions expressed by those who participate in its meetings.

JAMES WASHINGTON BELL
Secretary

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THE AMERICAN ECONOMY IN THE INTERWAR PERIOD

THE DECADE OF THE TWENTIES

By JOSEPH A. SCHUMPETER
Harvard University

Discussion of a span of past history is one of the best methods for testing what economic analysis can and cannot do and for shedding light both on the common ground and on the differences of opinion between us. In order to serve these purposes, I am going to ask two questions with reference to the economic history of the United States in the twenties of this century: Do we agree as to the facts? How far can we agree as to interpretation? In the third part of my paper it will be convenient to sum up separately about the causation of the "world crisis" 1929–32.

I

The statistical contours of the economic process are given by a number of time series that are familiar to everyone. Debits outside of New York City are perhaps the most important *single* index of the pulse of economic life. But most of us will, I think, agree that we cannot make much headway without considering the following "fundamental" series: total output; employment; price level; interest (commercial paper rate, bond yield, customers' line of credit rate, Federal Reserve bank rates); deposits (minus interbank deposits); income, wages (rates and pay roll, both monetary and real), and profits (dividends); consumption and investment expenditure; and that, for a variety of purposes, we also need series on: stock and bond prices; brokers, business and consumers' loans; issues; government income generating expenditure; net foreign balance (gold movements, foreign lending); LCL (or department store sales); residential and other building (separately); individual and group prices. This is by no means all, of course, but I submit that this list includes the bulk of the statistical information which most of us will require for purposes of diagnosis and which is analogous to the information a doctor assembles in the course of his investigation when we go to him for a check-up. I further submit, first, that a large amount of difference of opinion exists between us concerning the value and statistical merits and demerits of those items as well as concerning the relative merits of different series for the same item; the very meaning being controversial in the case of total output.

Second, I submit that these differences of opinion do not, in general, cause corresponding differences of opinion as regards the processes these series are intended to measure. For instance, we all agree substantially

on the general features of the actual movements of commodity prices at wholesale no matter what our opinion is about the degree of excellence of the particular commodity-price index used.

And, third, I submit that, so far as I can see, there are only two major exceptions to this statement. First, we disagree as to whether or not the bulk of time deposits was, *during the twenties*, "the same thing" as demand deposits so that we should be nearer the true facts of the monetary process if we work with demand plus time deposits than if we exclude the latter and connect them with "saving." Myself, I hold the former opinion. Second, we disagree as to the amount of savings. This, however is largely a matter of definition which should be settled according to the purpose in hand. If this purpose is to ascertain whether household receipts that are costs to firms were or were not "withheld" from the stream of expenditure, then it seems to me to be proper to exclude from the estimate of savings, realized but unspent capital gains; and to consider sums spent (however financed) on the acquisition of homes simply as part of household expenditure for this is what they actually are. To say that these sums were saved and that this saving was "offset" by "investment" in the homes seems to me to be needlessly circuitous at best, and suggestive of erroneous theories at worst. If, then, we define household expenditure on the lines suggested by these comments, it is the undeniable fact that, during the twenties, households habitually overspent their current receipts from firms[1] or that the algebraic sum of household savings was negative throughout, the deficit being covered by borrowing and by drawing upon speculative gains. This fact must be seen in connection with the other fact that income-generating expenditure by public bodies was positive and nonnegligible throughout, except in 1929.

Time series never tell the whole tale and must be supplemented by a detailed historical account of what actually happened in the economic organism. The economic history of the twenties has been written by very many authors. Since it is difficult to write history without implying some theory about causal relations between the phenomena reported, we shall not be surprised to find that much of that work is vitiated by preconceived notions of the authors. But I submit, first, that the essential facts have nevertheless been stated with adequate accuracy and, second, that we substantially agree about them. They are indeed familiar to all of us. For instance, we know all of us about the essential features of the various downturns and upturns and their different impacts upon different industries and parts of the country; the actual

[1] In the case of noncorporate business these receipts have been put equal to Professor Kuznets' figures for "entrepreneurial withdrawals." The rest of the net income of noncorporate business has been allocated to business savings.

behavior of the Federal Reserve System and of all banks; the booms in residential building, in utilities, in state and municipal public works; the developments in the new industries and in the "old new industries," especially the automobile industry and its satellites; the ups and downs in the agrarian sector and in foreign investment and trade; and so on.

II

The highest ambition an economist can entertain who believes in the scientific character of economics would be fulfilled as soon as he succeeded in constructing a simple model displaying all the essential features of the economic process by means of a reasonably small number of equations connecting a reasonably small number of variables. Work on this line is laying the foundations of the economics of the future and should command the highest respect of all of us. A few immediately valuable results it has produced already. In this paper I shall not, however, avail myself of any opportunities offered by this type of research[2] because, with the same frankness with which I have expressed my high opinion of its future, I must confess to a feeling that at present the premature and irresponsible application to diagnosis, prognosis, or recommendation, of what of necessity are as yet provisional and flimsy constructions can produce nothing but error and can only result in discrediting this pioneer work.

Nor shall I avail myself of any of the theories that attempt to explain economic processes in terms of monetary mechanics; that is, theories which attribute a dominant role in the economic process to such items as interest rates, deposits ("supply of money"), and the like. Take, e.g., the almost ludicrously exaggerated opinions many economists held in the twenties concerning the power of open-market operations over business situations. We then entered upon a period of reaction against the opposite views that had prevailed before and some will even today expect from a paper on that period nothing but a discussion of the play of monetary quantities. But I hope and believe that we are growing out of this and I expect, with more confidence than I should have felt ten years ago, assent to the proposition that analysis of the economic phenomena of any given period must proceed from the economic facts that produce them and not from the monetary aggregates that result from them.

Beyond this, I have only one general principle to posit. No decade in the history of politics, religion, technology, painting, poetry and what not ever contains its own explanation. In order to understand the religious events from 1520 to 1530, or the political events from 1790 to 1800, or the developments in painting from 1900 to 1910, you must

[2] The most important opportunity of this kind is afforded, I think, by the theory of inventory cycles; see, e.g., the remarkable work done by L. Metzler.

survey a period of much wider span. Not to do so is the hallmark of dilettantism. Evidently the same applies to economic history. The quickest way to give effect to this principle is to take our clew from the felicitous phrase, "the Economic Revolution of the Twenties." Only we must interpret it in the same sense in which Sir John Clapham maintained that an earlier economic revolution occurred, not in the last decades of the eighteenth century but in the first decades of the nineteenth. This is true if it means that *effects* did not fully manifest themselves—especially in the cotton textile and machinery industries—until the twenties and thirties of the nineteenth century. It would not be true to locate the *sources* of these effects in those two decades: the decisive industrial events did occur in the last quarter of the eighteenth. Similarly, everyone knows that towards the end of the ninteenth century and in the first decade of the twentieth a number of industrial events occurred that were bound to change the world's economic structure fundamentally but, partly owing to the "first" World War, did not take full effect until the twenties. To mention but one instance, it was not until then that the technological changes in agriculture that had occurred from the nineties on disclosed their power to dislodge eventually the majority of farmers in all industrialized countries. The response of the business organism to the impact of changes of this type adequately explains the general features of that period in the United States. For other countries, England in particular, this explanation must be supplemented by appeal to additional factors specific to their individual historical patterns.

History, if we would but listen, would teach us all the essentials about those processes. Response to the consequences of industrial revolutions has never meant undiluted depression. If we had time, it would be possible to show how and why it also produces spells of prosperity. But it always meant a depressive undertone, a tendency for prices, profits, and interest rates to fall, for output (real incomes) and, owing to the incident dislocations, unemployment to rise, and so on through a familiar list. And it meant precisely these things in the twenties: history—compare, for instance, the seventies and eighties of the nineteenth century—substantially repeated itself, even the booms in residential building and in public works duly putting in appearance as they had done in similar conditions before. In Europe, particularly unfavorable conditions, *fiscal policy among other things*, accentuated the depressive tendency. In the United States, particularly favorable conditions, *fiscal policy among other things*, accentuated—as they had in the eighties—the spells of prosperity, so much so that people lost sight of that tendency—though it was visible enough below a surface dominated by the speculative craze; and indulged in talk about prosperity plateaus—

though we may sense suppressed uneasiness in the applause that invariably greeted stabilization programs. Nevertheless, the economists who wrote the report of the President's Conference on Unemployment were not so wrong as it might seem when they declared (1929!): "Our situation is fortunate . . . we have a boundless field before us." They only forgot that the road into this boundless field leads through a succession of valleys.

Of all the points that should be made, two only can be mentioned. First, throughout the twenties, as always, prosperity as well as recession was essentially "spotty." That is to say, for no year is it possible to render a lifelike picture only by means of national totals or averages. Conditions always differed in different industrial and geographical sectors, and it is an essential feature of the process that they did. If, in a given year, one industry makes 100 millions and another loses 100 millions, these two figures do not add up to zero or, to put it less paradoxically, the course of subsequent events generated by this situation is not the same as that which would follow if both had made zero profits. This is one of the reasons why theories that work with aggregates only are so misleading and why they bid fair to achieve what institutionalist arguments have failed to achieve; namely, to convert all of us to institutionalism. The few general features by which I tried to characterize what I have called the depressive tendency of the twenties must be understood in this sense: they impinged upon different sectors of the economy in entirely different ways; no diagnosis of what actually happened can be derived from them alone.

Second, it is not only lack of time which motivates my silence on Federal Reserve policy. In a detailed picture it would have its place, of course. But I do not think that, speaking broadly, it made much difference one way or another. Federal Reserve policy is not entitled to such praise as we may feel disposed to bestow on maintaining the "Coolidge prosperity"; on the other hand, it seems to me plainly absurd to blame it for "not having prevented the depression." The Board was in no position to do either and its policy turns out, on analysis, to have been but little affected by the theories forged in glorification or criticism of its policy. The wider questions whether more resolute inflation or else more resolute deflation would have been indicated call for completely different answers according to the scheme of values of the man who asks them. The various "rigidities" in the system, real and alleged, seem to me to have been of minor causal importance in the economic processes of the twenties. Before going on, I shall briefly present a set of supplementary facts that will indicate the lines on which a fuller analysis would proceed.

1. *The Monetary Process.* Total demand plus time deposits (including

those in savings banks) minus government deposits plus currency in circulation which amounted to 20.3 billions in 1914 and to 38.5 billions in 1920 rose to 54.5 in 1929 (about 141 per cent of the 1920 figure). Note that the so-called "deflation" in 1921 produced, for the yearly figure, a fall of only 0.36 billion. Total income payments to individuals rose from 68.5 billion in 1920 to 82.4 billion in 1929, or by about 20 per cent. Bank debts of corporations fell throughout (especially in 1924), though the reduction was mostly well below the increase in other items of "outside funds." Nineteen twenty-nine shows the familiar phenomenon of substitution of stock to long-term debt particularly clearly. The long interest rate was on the downgrade and so was, *properly interpreted*, the tendency of short rates, though this tendency was obscured by the abnormal events of 1927–29 which also pushed up rates on customers' loans. Cash balances of nonfinancial corporations, 1926–29, were fairly stable at about 7 billions, with a moderate tendency to rise. All this must be seen in connection with the behavior of consumers' credit and the habit of households to spend part of their speculative gains, especially on homes. The picture is perfectly clear: if a loose monetary rein and liberal spending were all that is needed to insure prosperity, we should indeed have had a "prosperity plateau." But large-scale business certainly used the monetary ease in order to consolidate its financial structure and to gain independence from banks. The suggestive increases in 1922, 1924, 1927 in the investment item of banks outside of New York City should be particularly noticed as indicative of an important structural change in banks' assets.

2. *Prices and production*. After the downward revision of prices in 1920–22, which was relatively uniform (41 per cent for finished products, 45 for raw materials, 48 for farm products), the falling tendency remains perceptible under a fluctuating surface, but there can be as little doubt that it was not what it would have been under a stricter monetary management as that it could have been counteracted by additional government income-generating expenditure. Stricter management would have dampened prosperities, though in terms of dollar indices much more than in terms of real indices, and mitigated the subsequent depression. Deficit spending would have accentuated prosperities, though in terms of dollar indices much more than in terms of real indices, and might have avoided the depression. The latter proposition, of course, does not mean more than that inflation may turn *any* situation into one that will display the usual features of prosperity and does not, in itself, constitute any argument for it. But the opposite argument is much too complex to be presented in the available space. All I want to draw attention to is, first, that a period which everyone will associate with prosperity rather than depression did run its course on a price

level that was falling in the above sense, though in the short-run *waves* of prosperity prices turned up each time; and that, so far as these short-run cycles are concerned, prices played, statistically, a distinctly secondary role: things recovered in 1921, when prices were still falling; the downturn of 1920 set in when they were still rising.

Output of manufacturing industry, 1920–29, increased by about 50 per cent; man-hours per unit may have fallen by as much as 40 per cent (Fabricant); the corresponding figures for 1899–1907 (to avoid the crisis figure of 1908) were 61 and (about) 15. We have the picture of rapid though not unheard-of development in the output figure and one that may have been unparalleled in industrial efficiency. Friends and foes of the policies of the thirties should agree that it was these developments that raised the hopes associated with those policies above the level of chimeras. Also, most features of the period under discussion—movements of dollar figures in particular—find their chief explanation in them.

3. *Profits and Wages.* The tendency of profit rates to fall, obscured as it is by the events of 1928 and 1929, requires substantiation although it should not surprise anyone familiar with the statistics of the period. Impressions to the contrary result from the habit to concentrate attention only on corporations reporting profits or even, in some cases, on samples that contain the peak successes. The decisive fact stands out in any analysis of the obviously prosperous interval 1924–26, when the earnings ratios ran roughly between 2 and 3 per cent (1.98 for 1926) and "a considerable share of the total gross corporate business was done at a loss" (W. L. Crum).

The income distribution of the period displays the familiar invariants, both as to shares going to "factors" and as to the relations between income brackets. What appears to be a tendency for the relative share in national income going to the top 1 per cent of income receivers to increase seems to be accounted for by capital gains.

During the twenties the United States economic system taken as a whole absorbed, at rising monetary and real wage rates, substantially more labor than was displaced by technological improvement—in fact almost, though not quite, the simultaneous increase in the job-seeking population. In the over-all picture, that rise looks smaller than it really was owing to the sharpness of the rebound from the downward revision in 1921 that occurred in 1922–23. Detailed analysis of national as well as sectional movements lends more support to theories that aver than to theories that deny the existence of an inverse relation, other things being equal, between money wage rates and employment, though it is no doubt possible to make too much of the historical association of the prompt recovery in 1922 with the prompt fall in money wage rates and

of other facts that point in the same direction and tally well with the opposite experience of the thirties. "Mere facts" are never decisive per se. But neither should we neglect them. Any theory to the effect that the unemployment of the twenties had anything to do with any excessive propensity to save is in any case patently wrong.

III

One of the most common indictments leveled at economists is their alleged inability to offer a satisfactory explanation of the world crisis of 1929–32. I submit that this indictment is without foundation. We cannot —any more than can any physician or anyone else who deals with organic processes—prove the adequacy of our explanation numerically, but we can point to facts which will plausibly account for everything that happened. In order to do so, it will be convenient to distinguish between facts that explain why there should have been a "depression" and facts that turned this "depression" into "disaster." Both the validity and the practical usefulness of this distinction will presently become evident.

When we behold the face of a man in early middle age, we are to some extent able to form an idea of how he will look in old age. Performing an analogous operation on the pattern of the twenties, we have no difficulty in realizing that certain traits in it, merely by accentuating themselves as they were bound to do, would gradually turn it into a pattern answering to our idea of a depression, particularly if we attach proper weights to some of the features of the "Coolidge prosperity" that were obviously destined to fade out for the time being, such as the booms in residential building and in utilities. That is to say, the prevailing tendencies, such as the tendency of prices and profits to sag—quite normal phenomena for periods of the character indicated—had only to go further in order to submerge, temporarily and in some cases definitively, increasing *sectors* of the economy—the most defenseless of all being the agrarian sector—and to develop *sectional* difficulties or breakdowns from which downward "vicious spirals," attended by widespread unemployment, were increasingly likely to start. And this is the fundamental fact about both the depression (1929–32) and the subsequent recovery, although it would take elaborate analysis to display the full strength of this argument. It explains in this case exactly what it explains in all previous historical instances of the same kind. It does not explain, however, any more than it does in these previous instances, any "disaster" but only the supernormal sensitivity of the economic system to adverse occurrences and to the weaknesses in the institutional setup of the country.

I submit that, given what we have just described as depressive tend-

ency and supernormal sensitivity, the following facts constitute adequate explanation of the "disaster" in the United States though the list would, at least in part, look different for other countries. In thus invoking individual historical facts that are in a sense accidental we do not more confess failure of our analytic apparatus than does the physician who in his diagnosis takes account of facts that are in the same sense accidental or extraneous to the organism of his patient such as, for instance, drinking or the effects of a motor accident.

The first fact is the speculative mania of 1927–29. In itself, of course, stock and land speculation is a "natural" and even "necessary" concomitant of every business prosperity. But those wild excesses and the attendant financial practices were clearly abnormal; they can be explained only by a specifically American mass psychology and could not have been foretold from anything within the range of statistical fact or reason. They were bound to issue in catastrophe and, once this catastrophe had occurred, in distortion of the course of subsequent events particularly owing to the annihilation of that part of consumers' demand that had been financed from capital gains—and, in many cases, unrealized ones.

The second fact was the weakness of the United States banking system. There was, of course, no reason why, by 1929, a small number of giant banks, as impregnable to the impact of depression as were the English "Big Five," should not have evolved from the nebula of inefficient pigmies and why, incidentally, extensive branch banking should not have provided much better banking facilities for the public than actually existed in that year. It seems safe to say that without the obstacles set up by an irrational attitude of the public mind this would have been the case. Now I do not see how it could be denied that it was the—avoidable—three bank epidemics that occurred during the years of the crisis which broke the morale of the public, spread paralysis through all sectors of the business organism, turned retreat into rout and thus were the most important reasons, speaking quantitatively, for the prevailing distress and unemployment which would not have been half as bad without them, and for the prevalence of a feeling that the world had come to an end.

Third in importance was the mortgage situation, both urban and rural. Again I maintain that its most serious features were entirely due to reckless borrowing and lending; that is to say, to avoidable deviations from normal business practice. Two points should be particularly noticed. First, direct effects upon business and banks were serious enough; but still more serious were the psychological effects upon the community, for nothing is so apt to get on a man's nerves as will a threat to the roof over his head. The explanatory value for the crisis of

this element is ten times as great as that of the most elegant difference equation. Second, it is not always recognized that it was *only* the mortgage situation that made the plight of the farmers so serious. On the unencumbered farm, people will, of course, live less comfortably when prices break than when prices rise, but they are able to weather any economic storm without permanent injury.

These items do not, of course, exhaust the list. But I refrain from lengthening it because I wish to focus attention on what seem to me the cardinal points, and because the importance of some of the additional disturbers—such as the state of foreign trade and foreign investment which was fundamental, for instance, to England's difficulties—is smaller than it may look at first sight in the case of the United States.

I beg to add in concluding, first, that, however great the gulf between "stagnationists" and "antistagnationists" may be, they must largely agree in the analysis of any given situation. I am not a stagnationist—at least not in the sense that I believe in a future of permanent stagnation irrespective of political sabotage—but if I were, I should not have had to paint a greatly different picture of the conditions in the twenties. Second, that the difficulty of making practical recommendations—ex post—as to "what should have been done about it" at any point of time consists entirely in the fact that, unlike doctors, we hopelessly differ in aims, preferences, valuations. So soon as people sincerely tell us what it is they really want, we can tell them—and not more than the above analysis, rudimentary though it is, is needed for it—what should have been done at any moment in the past or, for that matter, what should be done now.

THE AMERICAN ECONOMY IN THE THIRTIES

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I. *Introduction*

Any discussion of the United States economy in the thirties almost inevitably resolves itself into either a general discussion of the business cycle or a discussion of the role of government in economic life. In this paper I am going to place primary emphasis on the role of government, although it will of course be necessary to advert to the nature of the economic problem with which the government had to deal and that will raise the general business cycle issue.

I choose this course because the thirties was the first peacetime period in United States history where the government took positive action, on a wide scale, to control the general level of economic activity. The history of that period must therefore be in the forefront of the minds of those concerned with government policies to forestall depressions in the future.

The policy of the Hoover Administration was to follow the path of orthodoxy and to assume that the situation demanded nothing more than the encouragement and rehabilitation of business. Interest rates were lowered and governmental economies introduced, and the Hawley-Smoot Tariff was enacted. The pressure of events led to the establishment of the RFC, but the President only very reluctantly agreed to extension of RFC loans to small businesses, to individuals, and to the states for relief purposes. The agricultural policy of the Administration was not so much a product of the depression as a continuation of the policies which had been previously adopted to relieve rural distress, which had continued throughout the whole period of the twenties. Beyond that the President offered good advice and exhortation to business to maintain business and employment. Business responded to an extraordinary degree, but the pressure of events was too strong. The Administration resisted to the end any proposals for direct federal unemployment relief.

It is evident from the political history of the thirties that the United States was no longer prepared to tolerate the privations of a serious depression in the traditional and "capitalist" way. The verdict of the electorate in 1932 testifies to this and the election of 1936 even more so. For the qualified recovery which had been achieved by 1936 can hardly explain the unqualified verdict of approval which was given to the Administration—especially since the great New Deal instrument of recovery—the NRA—had proved a dismal failure and had been pronounced unconstitutional.

But more than relief and recovery were at issue. Social and economic reform—in particular, social security, recognition of the rising political power of labor, and of redistribution of income and economic power—could no longer be delayed. Professor Schumpeter contends that such reforms are inherently anticapitalist in the sense that they impair the effective operation of the capitalist system—and did in fact impair it in the second half of the decade of the thirties. One of my aims here is to examine the force of his contention.

I have said that politically the Administration had no alternative but to do something about the depression. While this cannot be denied, critics have argued that economically it would have been preferable to let nature take its course. My major purpose in this paper is to examine the need for a recovery policy and to evaluate the effectiveness of the recovery policies which were pursued.

II. *The Evolution of a Policy*

I want now to sketch very briefly the policy objectives[1] of the Administration and the measures taken to reach them.

The First Phase. The President's first inaugural address did not contain many indications of the movement for reform that the New Deal was to be in its heyday, and neither did the legislation of the first "100 days." The first message to Congress requested banking legislation, the second drastic economies in government, and the third the agricultural adjustment legislation. Recommendations for home and farm mortgage relief, for unemployment relief, for securities and exchange legislation, for emergency railroad legislation, and for TVA followed in quick succession. On May 17 the President transmitted his famous message which requested the Congress to enact legislation to deal with the question of industrial wages, prices, and labor conditions on a nationwide scale and to provide for a comprehensive public works program. This message led to the establishment of NRA and PWA.

Towards the end of 1933 the gold purchase scheme was adopted and this led to the devaluation of the dollar and the Gold Reserve Act of 1934. The Trade Agreements Act of 1934 laid the foundation for future United States co-operation in the international economic sphere.

The Administration, or rather the Federal Reserve Board, continued the policy of cheap money inaugurated during the Hoover Administration. The gold inflow which was partially stimulated by the devaluation of the dollar enabled low interest rates to be maintained throughout the decade and to become a permanent feature of the American economy.

[1] I have used as my source for these policy objectives the public statements of the President. I have felt compelled to adhere rigidly to this course since any other would lead either to idle speculation or to a major research project which would take months or years to complete.

The revenue measures of the first New Deal period consisted of increased liquor taxes following the repeal of prohibition, emergency taxes on corporations and capital stock to provide for interest and amortization on the money borrowed to finance the public works program, the processing taxes to finance AAA, and finally the general but moderate increases in income, estate, and gift taxes incorporated in the Revenue Act of 1934.

That very briefly was the basis for the economic policy of the Administration during its first two years. The most striking characteristic of that program was that it attempted on a national scale to cure the depression by removing specific abuses and dealing with specific maladjustments. Relief was provided to the chief sufferers from the depression, agriculture was dealt with as a special problem, and the main weapon of industrial recovery was to attempt to introduce order in industry and to increase purchasing power by reducing the margin between prices and wages through the operation of NRA.[2] The impression I get from the President's statements on public works is that his motivation in urging the programs was to improve natural resources and to absorb unemployed labor into productive public employment in the absence of private employment rather than to use public works as a pump-priming device.

The point I want to emphasize is that an expansionary fiscal policy played a very minor role in the policy decisions of the period. Reductions of government salaries and veterans benefits were recommended by the President on grounds of equity and economy. The processing taxes and the liquor taxes can only be described as deflationary. In fact, at a press conference on April 7, 1933, the President said: "So much of the legislation we have had this spring is of deflationary character . . . that we are faced with the problem of offsetting it in some way."[3]

There can be no question in my mind that, despite large deficits, the Administration at this stage genuinely wanted to balance the budget, that it regarded its deflationary fiscal policies as contributions to recovery, that it hoped to achieve reflation through price policy rather than fiscal policy, and that it regarded reliance on public works as a last rather than a first resort.

The Second Phase. The year 1935 saw the symptoms of a pronounced change in the political orientation of the Administration. The meagre success of NRA and its ultimate invalidation by the Supreme Court meant that active co-operation of government and business in the process of recovery was at an end; and the mounting opposition from the

[2] The President stated this objective very clearly when he signed the National Industrial Recovery Act. See *The Public Papers and Addresses of Franklin D. Roosevelt* (New York: Random House, 1938), II, p. 255.

[3] *Ibid.*, II, p. 255.

Right to the New Deal as a whole meant that the Administration would have to enlist its support in other quarters. Moreover, the demand for reform which may have been numbed by the rigors of full depression was excited by the mildness of recovery. While the policies of the first New Deal aimed at relief and recovery those of the second were directed to recovery and reform.

The President refused to separate reform from recovery. In the State of the Union Message for 1935 he said: "The attempt to make a distinction between recovery and reform is a narrowly conceived effort to substitute the appearance of reality for reality itself."[4] He announced his threefold security program: the security of a livelihood through the better use of the natural resources of the land in which we live; the security against the major hazards and vicissitudes of life; and the security of decent homes.[5]

In the State of the Union Message of 1936 the President stepped up the tempo of his attack on "the royalists of the economic order [who] have conceded that political freedom was the business of the government, but . . . have maintained that economic slavery should be nobody's business."[6] The year 1936 was the one and possibly the only year in which the government of the United States could be described as being definitely of the Left.

The second inaugural in 1937 was full of ebullient satisfaction at the progress of recovery, but the President significantly said that "prosperity already tests the persistence of our progressive purpose,"[7] and issued his dramatic reminder that one-third of the nation was still ill-clad, ill-housed, and ill-nourished. But that was practically the end of the second New Deal; the onset of depression in the fall of 1937, the changing complexion of the Congress, and the growing preoccupation with international matters barred the further progress of reform.

The legislative and executive action of the second New Deal falls into three main groups: First, measures to give effect to the President's security program and to establish the status of organized labor; second, measures to attack the position of the "economic royalists"; and third, measures to rescue the first New Deal from the shambles created by the Supreme Court.

The great permanent monument to the President's security program is of course the Social Security Act of 1935 which took preliminary steps to free families from poverty in old age and from the hardships of unemployment. Whether or not the principles of the other main security measures of the Administration—WPA and NYA—have become firmly

[4] *Ibid.*, IV, p. 16.
[5] *Ibid.*, IV, p. 17.
[6] *Ibid.*, V, pp. 14–16.
[7] *Ibid.*, VI, p. 4.

established still remains to be seen. In his 1935 Message, the President had said: "The federal government must and shall quit this business of relief. I am not willing that the vitality of our people be further sapped by the giving of cash, of market baskets, of a few hours of weekly work cutting grass, raking leaves or picking up papers in the public parks."[8]

The third item in the security program—decent homes—ran into legislative and judicial obstacles. FHA insurance contributed to middle-class housing; but it was not until 1937 that provision for low rent housing for slum dwellers was made and that was but a modest attempt.

Labor won its charter under the second New Deal. The National Labor Relations Act of 1935 firmly established the right of collective bargaining and assured that the bargaining would be conducted by representatives of the majority of the workers involved—an assurance which was not provided under Section 7A of the National Industrial Recovery Act. The other great labor measure—the Fair Labor Standards Act—was not passed until 1938, and finally legislated the principles of minimum wages, penalty overtime pay, and the prohibition of child labor.

The "antiroyalist" legislation included the public utilities legislation, but the measures that are of most importance, especially for present purposes, are the tax legislations of 1935 and 1936. The President recommended to Congress imposition of increased estate and gift taxes, increased individual surtaxes, and graduated corporation income tax, and requesting study of other taxes including those "to discourage unwieldy and unnecessary corporate surpluses." With the invalidation of AAA and the consequent loss of processing tax revenues, he recommended an undistributed profits tax in March, 1936.

The 1935 Message was based not on the need for more revenue but on the need for redistributing wealth, plugging evasion loopholes, and reducing concentrations of economic power. Although the 1936 recommendation was based on revenue needs, the particular form of tax chosen was determined on grounds of equity rather than economics. The tax laws of 1935 and 1936 thus differed markedly in their motivation from their New Deal predecessors whose primary objectives had been to increase the receipts of the Treasury. But neither were they motivated by the need for an expansionary fiscal policy.

The Supreme Court decisions removed the processing taxes of AAA and relieved the Administration of the embarrassing necessity of trying to make NRA succeed. The crop control features of AAA were salvaged by the Soil Conservation Act, but NRA had no major successor so far as its prices and wage features were concerned. In fact, the whole spirit

[8] *Ibid.*, IV, p. 20.

of the second New Deal was inconsistent with "self-government in industry" which was the essence of NRA.

As a result of the Supreme Court's surgery and also of the enactment of the Bonus over the President's veto, the government's contribution to recovery after 1935 depended almost entirely on the fiscal effects of its policy; that is, efforts to create purchasing power by attempts to adjust the price-wage structure disappeared and the stimulus to economic activity given by the government was the income-creating effect of the budget deficit. But the deficit was not the result of fiscal plans laid by the government to achieve economic goals. It was rather the net result of the budgetary requirements of relief and reform measures and the political infeasibility of increasing taxation *pari passu* with expenditures. Expenditures depended on the amounts required to provide WPA employment for the unemployed and the new taxes were based largely on the Administration's program to redistribute wealth and income. It was thus a matter of accident rather than design if the fiscal policy actually pursued did in fact promote recovery at the desired rate.

The Third Phase. The third phase of the New Deal period opened with the depression in the second half of 1937. That depression took everyone by surprise—government and public alike. The year 1937 had opened with serene economic optimism. The 1938 budget was to be balanced and the economic instruments of government were to be directed to curbing a boom. The portents in the fall of 1937 were not heeded and it was only in the spring of 1938 that the Administration was convinced that it had a serious depression to contend with.

In April, 1938, the President sent to the Congress his "Recommendations Designed to Stimulate Further Recovery."[9] This document is remarkable in that it was the first outright recommendation by the President designed to achieve recovery through fiscal policy. Increased appropriation for WPA, NYA, Farm Security, and CCC were urged with the frank objective of increasing national income. The government credit agencies were to make cheap credit available to business, and the President recommended a large expansion of the general public works program. The message is noteworthy for the omission of any recommendations for increased taxation. The Treasury had evidently been appeased by recommendations for the elimination of tax-exempt bonds and for federal and state taxation of all government salaries. The goal was a national income of 80 billion dollars, and the President asserted that that goal could be achieved only if private funds are put to work "and all of us recognize that such funds are entitled to a fair profit."[10]

[9] *Ibid.*, 1938 Vol., p. 221.
[10] *Ibid.*, 1938 Vol., p. 226.

Beyond acting on the President's recommendations, the chief contribution of the Congress to the recovery program was to enact the Revenue Act of 1938 which repealed all but a token remnant of the excess profits tax and substituted a corporation income tax on firms earning more than $25,000.

The other main legislative achievements of the third phase were the Fair Labor Standards Act to which I have already referred and the new Agricultural Adjustment Act of 1938. The latter act instituted the present method of assistance to agriculture through voluntary acreage control and Commodity Credit Corporation price support.

The other noteworthy feature of the third phase was the antimonopoly campaign which found its expression in an aggressive application of the antitrust laws and aggressive investigation through the Temporary National Economic Committee. The NRA policy of recovery through agreement was finally and completely reversed.

Thus through a process of trial and error and of ordeal by Congress and the Supreme Court the Administration wound up its peacetime record and concluded the decade with a clear-cut recovery program of fiscal policy and cheap money. The agricultural policy was the most effective method yet devised to achieve the objective of a floor under agricultural prices. The reforms of the banking and financial system and social security were accepted as permanent, and labor had won its place in the sun. The main unfinished piece of business was the monopoly program. The onset of war postponed the formulation of a comprehensive antimonopoly policy.[11]

III. *Effects on the Economy*

I shall now attempt to analyze the effects of the government's policies on the American economy during the thirties. To do this I shall first consider the behavior of the main determinants of private economic activity—the factors that influence private decisions to invest and to consume. Such a discussion should enable us to decide what effect the government's policy had on the structure of the American economy, and separate the sheep from the goats among the plethora of policies which were pursued.

Let me turn first to the vexed question of private investment. I shall discuss it in terms of the usual division into producers' plant and equipment, residential construction, net additions to inventories, and foreign investment.

Plant and Equipment. Both friendly critics and active opponents have argued that the New Deal policies—at any rate before 1938—were

[11] For an excellent survey of the New Deal see Basil Ranch's *The History of the New Deal* (New York, 1944).

seriously detrimental to private investment in plant and equipment. It has been argued with cogency that the tax policy—the progressive individual income tax, corporation taxes, and especially the undistributed profits tax—diminished the incentives of individuals and corporations to risk their money in venturesome enterprises. It is possible that the antispeculation reforms, while increasing the soundness of investment, diminished its quantity. There is considerable agreement with Professor Schumpeter's argument that anticapitalist attitudes provided a chilly climate for innovation. Finally, there was the all-embracing charge that the mutual distrust of government and business produced a "strike of capital." These arguments lose none of their appeal since something is required to explain why plant and equipment expenditures in the thirties never approached their peak level in the twenties.

On the favorable side, it can be argued that the cheap money policy and the federal loan policy encouraged investment in the traditional way by reducing the cost of borrowing. Also, somewhat to my surprise, I find that Professor Schumpeter includes NRA as a positive recovery factor. He argued that it "pegged weak spots in industries, stopped spirals in many places, mended disorganized markets" and "even Blue Eagles do count for something when, objective conditions for revival being given, it is broken morale that is the matter."[12] While I am quoting Professor Schumpeter, I should like to record his views on the contention that government deficits per se impede business expansion. He says: "Some of the arguments adduced for this possibility fully merit the shrugging of shoulders with which they are usually met; for instance, the argument that the unbalanced budget destroyed confidence."[13]

These arguments are I believe all sound in principle, but, in order to assess their impact on the economy, we need some quantitative measure of their effects. The way for such measurement has been paved by Tinbergen's epoch-making work,[14] but his own study does not extend to the period we are investigating. Tinbergen's work is now being revised, extended, and improved at the Cowles Commission and has resulted so far in a preliminary manuscript by Mr. Lawrence Klein. The Commission and Mr. Klein have generously given me permission to use their results with the caution that they must be regarded only as first approximations. This reservation applies not only to Mr. Klein's results but also to other conclusions based on correlation analysis to which I shall refer.

Mr. Klein has obtained a relation from the data over the period 1921–41 which satisfactorily "explains" the demand for net additions to

[12] J. A. Schumpeter, *Business Cycles* (New York, 1939), pp. 992, 993.
[13] *Ibid.*, p. 1005.
[14] J. Tinbergen, *Business Cycles in the United States* (League of Nations, 1939).

plant and equipment in terms of the private net output of the economy in the recent past as a positive factor and the existing stock of capital equipment and the price level of capital goods as negative factors. The unexplained residuals are randomly distributed, and, so far as I can see, none of these residuals can be identified as disturbances of the relation due to government policy. For instance, in relation to the values yielded by the formula, investment was abnormally high in 1929, but still higher in 1937. The plausibility of the relation is increased by the satisfactory results which the same method yields for particular individual groups such as public utilities and mining and manufacturing.

I am not satisfied that this relation reveals the whole truth about investment demand in all circumstances. I believe an adequate theory requires the inclusion of net profits after taxes as an explanatory variable. It has not emerged as such in Mr. Klein's results because net corporate profits (excluding inventory revaluations) have remained very highly correlated with private output. Profits before taxes retained throughout the thirties the same relation to private output, with practically no disturbance, as existed during the twenties. The tax changes of the thirties were not sufficient to disturb greatly the relation between profits after taxes and output. I therefore interpret Mr. Klein's results to mean not that tax changes are irrelevant but that those which in fact did occur had no significant effect.

Mr. Klein's demand function also does not include the rate of interest as an explanatory variable. Although interest rates can be demonstrated to be determining influences in other countries, they are apparently dwarfed by other influences in the United States. Tinbergen reaches the same conclusion and demonstrates that the determinants of investment differ widely from country to country.

The results lead to the conclusion that the underlying factors determining investment in plant and equipment were the same in the twenties and the thirties and that government policy affected investment only insofar as it affected the explanatory variables of the relation.

The large stock of capital which played an important role in depressing investment in the first half of the decade was the inheritance of the twenties and not a product of the thirties. Government policy affected the rate of investment insofar as it influenced national output and capital goods prices. Its influence on output depends on the expansionary effects of all the government policies. Prices of capital goods, and especially construction costs, did rise abruptly and disproportionately between 1936 and 1937. This may be ascribed to wage increases and to increases of world prices of raw materials.

I cannot regard these statistical conclusions as in any way final or definitive, and I am sure the Cowles Commission takes the same point

of view. However, until evidence to the contrary appears, I am prepared to enter a verdict of "not proven" to the charge that the political and economic environment of the thirties affected the incentive to invest in plant and equipment through its effect on business confidence.

Residential Construction. The low rate of investment in residential building in the thirties has given rise to explanations involving lack of confidence of the same type I have described in relation to plant and equipment investment. I therefore need not repeat them here, but turn at once to the statistical evidence.

There is a growing volume of reasonably satisfactory attempts—all on the same lines—to explain statistically fluctuations in residential building, and I feel I am here on less treacherous ground than that which I have just left. I refer to the work of Roos,[15] Chawner,[16] Tinbergen[17] and Derksen.[18] Mr. Klein has re-examined the whole question for the period 1921–41 in the light of later statistics than were available to the other writers. He explains expenditure on nonfarm residential building in terms of disposable income, the rent level, construction costs, and net increases in families in the recent past. But the rent level itself depends on conditions in the housing market. Mr. Derkson has given the most satisfactory explanation of rent in terms of the vacancy ratio two years before and nonfarm family income.

These studies give a satisfactory explanation of residential building over the twenties and the thirties, and lead to the conclusion that the major factor accounting for the low level of housing in the thirties was the high rate of construction in the twenties. Higher construction costs also reduced total housing expenditures in the later years of the decade. This was probably reflected, at least partially, in a reduction in the size rather than the number of dwelling units constructed.

Here again I can find little evidence that taxation or lack of confidence in the government was an important explanatory factor. Had it been, surely 1937 and 1938 would have been years of markedly subnormal activity, which they were not. Furthermore, I believe that these factors are less likely to have an adverse effect on residential building than on business plant and equipment expenditures. The main factors which account for the low level of residential construction shown in the thirties appear to be a relatively large supply of housing in relation to the number of families, especially in the first half of the decade, high construction costs, especially in the second half, and a low level of income throughout.

Business Inventories. The behavior of inventories over the thirties

[15] C. F. Roos, *Dynamic Economics* (Bloomington, Indiana, 1934), p. 69.

[16] L. J. Chawner, *The Residential Building Process: An Analysis in Terms of Economic and other Social Influences* (Washington, 1939).

[17] *Op. cit.*

[18] J. B. D. Derksen, "Long Cycles in Residential Building," *Econometrica*, 1940, p. 97.

requires no particular comment except for two episodes. Inventories were liquidated under the impact of declining production after the onset of the depression and were built up as recovery got under way. The two exceptions to this regular behavior I want to notice are the short-lived inventory spurt in the second half of 1933 and the abnormal accumulations of inventories in the latter half of 1936 and 1937. The 1933 incident must be explained by the prospects of higher costs, especially wages, under NRA, while the accumulations in 1936 and 1937 were largely in response to the expectations of higher prices aroused by the sharp general increases in wage rates at that time—although the prospects for higher world prices for raw materials probably also had significant effects. The 1933 flurry was followed by a mild liquidation. The liquidation of the accumulations of 1936 and 1937 was a major factor in explaining the sharpness of the downswing in 1937 and 1938. These episodes were, I believe, the most important effects of the general behavior of wage rates in the period.

Foreign Investment. Foreign investment as represented by "net exports" reached an average annual rate of about 1 billion dollars in the latter half of the twenties. It did not regain this rate until European war demands expanded American exports at the end of the thirties. What then was the effect of the devaluation of the dollar and the trade agreements negotiated after 1934? It is impossible to isolate the effects of these measures since conditions in the outside world remained by no means static. I believe, however, that devaluation did accomplish some increase in the positive balance of payments in the year or two after it was undertaken, but that restrictive measures taken by other countries, whether in retaliation or for other reasons, very soon offset this effect. It is also an almost impossible problem to isolate the effects of the trade agreements. My own opinion is that the trade agreements negotiated in the thirties laid the foundations of a policy of freer trade in the future and did not have a marked impact on the operation of the economy of the thirties. I must hasten to add that this opinion does not belittle the achievement of those who succeeded in reversing the policy exemplified by the Hawley-Smoot tariff.

I conclude that the net effects of United States economic foreign policy were reflected in the domestic economy rather than in foreign trade. Chiefly by reducing confidence in other currencies, devaluation probably accelerated the gold inflow into the United States and thus facilitated the cheap money policy. Secondly, by raising the world dollar prices of agricultural products, the burden of aid to agriculture on the federal budget was somewhat reduced—and after all, was not the real objective of devaluation to raise agricultural prices?

Consumers' Expenditures. It has been widely argued that the govern-

ment's policies of the thirties, whether designed for the purpose or not, did derive economic justification from their effect in increasing consumption in relation to national income.

NRA was intended by the President to raise wages by more than prices and thereby redistribute income and increase consumption. The antimonopoly policy of the latter part of the decade was intended to achieve the same result. There was a widespread belief that higher money wages, unassociated with any price policy, would increase mass purchasing power. One of the objectives of agricultural policy was to increase total consumption by improving the lot of agriculture. More progressive income taxes were held to redistribute income after taxes in favor of those more likely to spend on consumption. One of the main economic arguments for the undistributed profits tax was that it would reduce corporate savings and thereby increase income payments to consumers.

Here again the only way to assess the quantitative validity of these contentions is to test the matter statistically. Their quantitative effects would be reflected in the propensities of individuals to spend out of their disposable incomes and of corporations to distribute their incomes as dividends. This evidence can also be reinforced by such evidence as there is on the distribution of incomes.

There is widespread agreement among economists that consumers' expenditures throughout the whole interwar period can be explained as a function of disposable income with a rising time trend representing progress towards higher living standards. Disagreement only exists as to the form the relation should take. Some economists use deflated series, others the money data. Some contend that the regression shifts as between prosperity and depression years. My own belief is that the relation which satisfies both theoretical and statistical requirements best is to relate per capita real consumption to per capita real income for the whole period.[19] But whatever the correct law is, there is no evidence that it changed during the thirties. Thus whatever changes in the distribution of individual incomes after taxes did occur, they had no perceptible influence on consumer spending in relation to disposable income in the aggregate.

The behavior of corporations in distributing their dividends has so far defied systematic explanation, but the figures do enable us to answer the question with which we are mainly concerned. Mr. Hoover's policy of exhortation probably did have some effect in inducing corporations to distribute more than they earned in 1930. But corporations as a whole continued this practice through 1938—though on a smaller scale. Unless it can be argued that Mr. Hoover's advice was still being adhered to

[19] A. Smithies, "Forecasting Postwar Demand I," *Econometrica*, Jan., 1945, p. 1.

it is difficult to explain the behavior of corporate savings except in terms of the depression itself.

The paucity of official data on the distribution of individual incomes does not permit any definitive conclusions. I am impressed, however, with the remarkable stability of the relation between private wages and salaries to private gross product. Throughout the twenties and thirties wages and salaries remained extraordinarily close to 50 per cent of the total. This relation is a dominant factor in determining the distribution of individual incomes. There is some indication that in 1937 labor did succeed in increasing its share of the total product, but these gains were rapidly wiped out by subsequent price adjustments. I am unable to find any identifiable influence of the antimonopoly policies. I infer, therefore, that the redistributive policies of the thirties either did not have their anticipated effects on consumption or were not carried as far as has sometimes been thought.

My survey of the determinants of investment and consumption thus leads to the conclusion that, by and large, during the thirties both businesses and consumers were influenced in making their expenditure decisions by the same factors in the same way as in the twenties. I submit this conclusion with some diffidence since the statistical relations on which it is based are admittedly tentative. But that evidence all leads in the same direction. On the other side there is only a priori opinion however well informed and experienced.

The analysis also enables us to identify the factors which did affect the data on which the decisions of investors and consumers were based. They are as follows:

1. The high rate of construction of business plant and equipment and residential building during the twenties increased the stock of capital to a high level and thus made for abnormally low investment in the thirties.

2. Declining population growth contributed to the relative abundance of the supply of housing. I should add that I am speaking here of abundance from the point of view of the operation of the private economy and not from any welfare point of view.

3. Increases in construction costs and the prices of capital equipment in relation to the general price level, particularly from 1937 on, contributed to the low rate of long-term investment, as compared with the twenties.

4. The rapid increases in wages contributed to the inventory speculation in 1936 and 1937.

5. The net foreign balance remained at a low level until European rearmament increased United States exports.

These are all factors tending to depress the level of national income.

The single factor operating in the opposite direction was the expansionary fiscal policy of the federal government, which considerably more than offset the contraction in the construction programs of state and local governments which occurred after 1929, and afforded a strong positive stimulus to national income and thereby increased the rates of private consumption and private investment.

IV. *Evaluation of Policy*

I can now attempt to answer the questions which I raised at the beginning of this paper: Was a positive government policy required if full recovery was to be achieved? What were the effects of the policy actually pursued? Did reform conflict with recovery?

We can answer the first question with some confidence. Even if all the disturbing influences that occurred during the thirties had been absent, the high rate of accumulation of capital during the twenties would have made for a low rate of investment and consequently a low rate of income during the thirties. If nature had been left to take its course, there would presumably have been a prolonged period of disinvestment and depression before it would have again become profitable for businesses to undertake the rate of investment expenditures required for full recovery. Our analysis leads to the conclusion that recovery would have arrived eventually, although there is no reason to believe that the "speculative" influences which made 1929 an exceptional year would have recurred. The contentions advanced in the heat of controversy that but for the New Deal full recovery would have been achieved by, say 1935, merit no attention. In fact, I know of no economist who would now argue that if "orthodox" policies had been continued, recovery up to 1937 would have been more rapid than it was.

Whatever the legitimate doubts about the statistical explanations of investment, I do believe the negative correlation between investment and the existing stock of capital is firmly established on both theoretical and statistical grounds. It follows that government action which mitigates depressions by policies which increase the rate of private investment tend to diminish its rate in the following boom. I make this observation, not as an argument against stabilization policies, but merely as a word of warning against the assumption that an effective countercyclical policy will achieve prosperity. Such a policy would tend to eliminate the peaks as well as the troughs. For full employment more is required.

From the point of view of recovery our analysis has shown that the only policies which need to be considered are fiscal policy and wage policy. I have ruled out the vast array of measures such as NRA, AAA, and devaluation, except insofar as they were reflected in fiscal policy

and the behavior of wages. For any other effects would have been reflected in changes in the behavior of consumers and investors, which remained substantially unchanged.

I have nothing further to add on wage policy. I am not concerned to debate the extent to which the actual behavior of wages can be regarded as the consequence of the government's policy. I would like, however, to remove one possible misunderstanding. Wage behavior proved disruptive in the thirties, first, because changes were abrupt and, second, because they contributed to an increase in construction costs in relation to other costs. To acknowledge this must not be interpreted as criticism of a wage policy which requires increases in money wages consistent with increased productivity of labor and stability of prices.

I have shown that before 1938 the fiscal policy of the government was a matter of accident and, in detail, was a mass of contradictions. Expansionary expenditure programs were the occasion for the introduction of regressive tax measures. I feel quite convinced that in the early days of the New Deal it was political infeasibility alone that prevented further measures of taxation. We have seen that the tax measures undertaken did not in fact have the desired results on the relation of consumption to income or the feared results on investment. The results of the new taxes must be judged by their over-all effects. These were to reduce private net output in relation to the total. By the end of the thirties it was necessary to rely on a greater rate of government production of goods and services to attain any given national income goal than at the beginning of the decade. On the other hand, the deficit required to attain that goal was smaller as a result of the New Deal taxes. Sometime the United States may have to make up its mind whether it wants to keep private enterprise or hold down the national debt.

The expenditure side of the government's policy was also contradictory. Expenditures were cut to help balance the "regular budget" while the "emergency budget" increased. Expenditures were determined by the need to relieve distress rather than by any consideration of the relation of fiscal policy to economic expansion. Nevertheless, the rate of expansion between 1933 and 1936 was remarkable. But in the light of what was accomplished in 1941, I am inclined to think that rate of expansion could have been greater had the fiscal policy been more ambitious. There were few bottlenecks in 1933, and if they appeared later it was due to the slowness rather than the rapidity of recovery. For instance, prolonged depression in the building industry did impair the skilled labor supply.

It has been alleged that the inflationary situation in 1937 was the consequence of the expansionary fiscal policy. But the expansion from 1938 to 1941 was attended with no phenomena which could be des-

cribed as inflationary. I therefore cannot accept the explanation for 1937, especially since that inflation can be accounted for on other grounds—particularly the inventory boom which I have already discussed.

The 1937 experience has been used as an argument that an expansionary fiscal policy cannot be tapered off without creating a depression. The year 1937, however, is hardly a fair test since, as we have seen, it contained the seeds of a highly unstable situation not themselves the result of the fiscal policy. But I do agree that tapering off may cause difficulties. I am to some extent reassured on this point by the remarkable way in which the economy has withstood the "tapering off" of war expenditures in the last few months. The government did face a difficult situation in 1937. Full employment had not been achieved but inflation had. Hindsight leads me to the view that it would have been preferable to let the inflation run its course rather than to contribute to a serious depression.

After 1938 fiscal policy again made its full contribution to an unspectacular recovery through 1940. Rearmament and war produced full recovery, but postponed for a later depression the conclusion of the peacetime experiment.

My analysis of investment has led me to disagree with Professor Schumpeter's contention that reforms are per se anticapitalist and therefore depressive. But I do agree that in other ways reform impeded recovery. In the first place the abruptness of the wage increases in 1936 and 1937 can be to some extent attributed to the government's labor policy. In the second place, reform measures gave rise to some of the contradictions of fiscal policy. From the national income point of view, social security meant a highly deflationary tax which was offset to only a trivial extent by disbursement of benefits. But the consequences were accidental and not necessary incidents of reform. My conclusion from the thirties—to say nothing of the forties—is that the American economy can stand a lot of buffeting and that immediate profits can do wonders for business confidence.

V. *Conclusion*

My main conclusion on government policy from the experience of the thirties is that fiscal policy did prove to be an effective and indeed the only effective means to recovery. This conclusion does not, of course, imply that other methods could not have been effective; merely that these would have had to be applied much more drastically and vigorously than they were in the thirties. For instance, if the government were to assume complete control over wages and prices, it might prove possible to achieve recovery by that means alone. If the government

were to push far enough the policy of monetary expansion which will be discussed by Mr. Means, I have little doubt that that too would lead to recovery.[20] My own opinion, however, is that a flexible fiscal policy, which pays due attention to flexibility on both the expenditure and revenue sides, would provide the most conservative solution.

I do not mean by this that direct controls have no place in stabilization policy. On the contrary I do believe that a vigorous, antimonopoly policy is necessary to prevent abuse of fiscal policy. But I doubt whether such a policy can be relied on to effect major redistributions of income. The evidence of the thirties suggests that the redistributions that did occur in that decade were the direct consequence of fiscal policy.

The thirties have demonstrated that fiscal policy can promote expansion without disturbing the structure of the economy, but as I have said, the last chapter remains to be written; and meanwhile I am left with the impression that the road from depression to enduring recovery is not an easy one.

I am convinced that it is much easier economically to avert depressions than to cure them. My argument leads to the conclusion that the thirties can be explained in terms of the cyclical process and were very largely the product of what had gone before. And that means that a depression of the same order can and probably will recur unless it is arrested by government action. One very eminent observer has described the New Deal as "the price we paid for time to think." At present I am afraid there is danger that we may become impervious to thought in the forties as we were in the twenties.

[20] I have supported this contention in, "The Quantity of Money and the Rate of Interest," *Review of Economic Statistics*, Feb., 1943, p. 69.

DISCUSSION

GARFIELD V. COX: Professor Schumpeter's stimulating presentation has concerned the degree of agreement first as to the major economic facts of the twenties and second as to interpretation of the facts. With respect to interpretation he has considered, first, why that decade developed as it did and, second, which of its features contributed most to the severity of the ensuing depression.

Under facts he has called attention to two matters he finds subject to disagreement. The first relates to bank deposits. He has good ground for including time deposits for that decade as part of the circulating medium. During the twenties a substantial fraction of time deposits in commercial banks consisted of large items to the credit of business firms and persons of wealth, while under present practice commercial banks do not accept such time deposits. Also, time deposits rose rapidly to match a considerable part of the growth in bank loans and investments. But in a study of money flows this difference in practice should affect the transactions velocity and the so-called "income velocity" of checking deposits. If in the twenties commercial banks had refused to hold time deposits for business concerns and had limited individual time deposits as now, demand deposits would presumably have been larger than they were and their velocities would certainly have been lower. The question would seem to be whether one prefers to include time deposits with demand deposits and get lower velocity figures, or to assume that large time deposit holdings register their monetary effect through a higher velocity of checking deposits.

Professor Schumpeter's second point relates to disagreement as to the amount of savings. He protests the practice of designating as savings the sums accumulated and spent by family units to acquire ownership of houses for their own occupancy. I do not agree with his criticism. Housing is far more costly than other items of consumers goods and is especially durable. Much housing built for owner occupancy is soon rented or sold. Although as high a proportion of cars as of houses may be sold secondhand, the much higher obsolescence rate and the shorter life of cars leave housing in a special category.

To return, however, to Professor Schumpeter's main point, if one excludes from savings both sums spent in the purchase of homes and realized but unspent capital gains, one must, I think, agree with him that the algebraic sum of household savings was probably negative during the twenties. Extension of installment financing into new fields and rapid increase in its volume, together with unprecedentedly widespread capital gains, were factors encouraging to high consumer spending. It is also clear that state and local governments were going into debt by a total considerably in excess of federal debt retirement.

Turning to issues of interpretation, I find myself in accord with much of what Professor Schumpeter says and seems to imply. I am not certain that I sense fully his position concerning monetary factors in this period. I share his well-known view that Federal Reserve policy had much less effect upon

the course and level of business activity and prices during the twenties than was widely imputed to it at the time. Nor do I think that a different central banking policy could have prevented a depression after 1929. I shall limit myself to two respects in which action different from that taken might have brought better results. Had the Federal Reserve possessed and exercised in the twenties its present control over margin requirements on loans on listed stocks, the bull market might not have run to such excess. Given smaller capital gains consumer spending would presumably have been materially less in 1928–29, but the price would probably have been worth paying. If, when recession began in 1929–30, the Federal Reserve authority had by law possessed great latitude in its reserve requirements for both notes and deposits, and had created and maintained from the beginning of the business decline a substantial surplus of member bank reserves, it seems reasonable to suppose that the shrinkage of member bank assets and deposits would have been less severe than it was. The amount of bank credit provided by the Federal Reserve banks declined in 1930 and fell still lower in the fore part of 1931, and almost no excess reserves were provided until the spring of 1932. Those who hold that an easy money policy is ineffective against cyclical contraction may be correct, but they should not cite the business decline of 1930–31 as proof, for it is a gross exaggeration to call what happened in that period the execution of an easy money policy.

I also seem to assign greater weight than does Professor Schumpeter to effects of World War I upon the character and course of economic activity in the twenties. In explaining the latter he stresses industrial changes of the late nineties and of the prewar years of this century, and assigns to World War I principally the role of having helped to delay until the twenties the full effect of these prewar technological changes. Certainly one may also impute to the war the inventory boom of 1919, and most of the price rise which was partly erased in the sharp deflation of 1921. The housing boom of the twenties was surely more intense because of the lack of building during the war. Railroad maintenance and utility and public construction were similarly affected. The farm mortgage burden was heavier than it would have become in the absence of the war boom in farm land values. To a lesser degree the urban mortgages of the twenties were also in excess of what they would have been in the absence of the war price rise. The business recession of 1923–24 seems to have been touched off largely by the fears of inventory holders that the price slump of 1921 had not completed the postwar decline of prices. Also the 1923 recession, once begun, was cushioned by the high rate of construction as that industry strove to eliminate a housing shortage which the war had intensified.

The war also extended its influence into the twenties in ways intangible but probably important. The postwar decade brought a turn away from the wartime idealism and internationalism of Woodrow Wilson and carried with it a shift of popular sentiment toward political and economic conservatism. Confidence in private enterprise and in opportunities for investment and, after a few years, the speculative spirit of the new era were nourished in part in that soil.

Probably no one is so well qualified as Professor Schumpeter to trace the prewar technological background of the economic developments of the twenties. It is also a service for him to point out the erroneous in interpretations that have been widely held. But these matters have limited the time left to him to consider the twenties themselves. I should like to mention certain features of the major business cycle of that period, and a few observations concerning the successive short cycles contained within the longer one.

Though earlier decades saw the inception of more revolutionary technological changes than did the twenties, probably none had experienced such broad and rapid development of the new and seminew in so many sectors of industry. Certainly none had seen so great an increase in the production of durable consumers goods. Admittedly conditions were spotty, both by types of economic activity and by geographic areas. But when change is rapid the investment in construction and in equipment for the new is usually far greater than the production for replacement which would have occurred in the relatively declining industries and areas if no changes had come to depress them. Probably no decade has seen housing shifts greater than those occasioned in the twenties by the drift to cities, the rapid growth of certain manufacturing centers, and the movement to suburbs. From 1922 to 1929 consumers' spending rose continuously save for a minor recession in 1927. Construction, public and private, rose to a peak of almost 12 billion dollars in 1925, held just under that level for three years, and declined sharply in 1929 in spite of a slight gain in plant construction and because of an accelerating drop in housing. Construction seems to have moved independently of the minor cyclical slumps of 1923–24 and of 1927. Housing paced the upswing of 1921–22 and the decline of 1929–30. The economic basis of the housing boom is reflected in the fact that while construction costs fell sharply, rental rates rose, first in the face of declining national income into 1922 and then in step with rising income through 1925. After that year rising costs and declining rentals brought a reduction in residential construction which gathered momentum slowly at first but rapidly after 1928.

Turning to the short cycles, the postarmistice slump was deferred for eighteen months, largely because of heavy federal deficit spending through the summer of 1919, and of record-breaking exports paid for by our loans. In spite of the housing shortage and of the undermaintenance in the war years the upswing was essentially one in transient goods and in inventory accumulation. High wage rates and complaints of labor inefficiency failed to stimulate investment in laborsaving equipment, probably because both prices and wages were expected to decline. The 1920–21 fall in prices and wage rates was swift and drastic. The recovery, which was led by housing, was soon reinforced by other forms of construction, by output of automobiles, and later by increase in inventories. Consumer spending other than for housing seems to have lagged considerably in that upswing. The slump of 1923–24 was generated largely by inventory reduction. Commodity prices had risen sharply enough to remind businessmen of 1920 and they

did not propose to be caught again so soon with large stocks in a falling market. The downswing was cushioned by expanding construction. The upswing to 1926 was the work of numerous industrial sectors of the economy. In the mild recession of 1927 consumer spending seems to have declined slightly. Farm prices slumped sharply in 1926–27 and many country banks failed in the Middle West and South. Suspension of car output by Ford cut the industry totals heavily. Business inventories were reduced. But the total of public and private construction continued near its peak, stock prices rose, and confidence reigned. Although construction costs were rising, vacancies growing, and rents declining, the conviction that we had entered a new era free from financial crises and depressions gained increasing favor. A new rise of public utility and industrial construction, of factory output and of inventories got under way.

In any explanation of the unprecedented severity of the collapse from 1929 to 1933 the factors stressed by Professor Schumpeter—the fall of stock prices, excessive mortgages and bank failures—should receive heavy weight. I infer that Professor Schumpeter considers the chief institutional defect in our banking to have been the failure of the 30,000 banks of the twenties to have combined into a small number of giant banks each having several hundred branches. Many economists would question whether branch banking was the *most* needed reform in commercial banking structure and practice to minimize depressions.

Professor Schumpeter plays down the importance of international factors such as the cessation of American foreign lending, the growing barriers to international trade, the struggle to re-establish and maintain the gold standard, and the huge short-term foreign balances in the principal financial centers, on the ground that trouble from these sectors was more consequence than cause of the depression. But the causes of such a depression are so complex that any one, or any limited group, of them taken alone is rather certain to seem to have been more effect than cause. As troublemakers I should rate these international factors as of substantial importance.

I should also give considerable weight to the fact that public works, instead of rising, were sharply curtailed parallel with the drop in private construction.

The very confidence developed in the twenties in the institutions, policies, and leaders of that period contributed to the lack of considered ideas, policies, and leadership appropriate to combat a depression of great and unforeseen severity.

Finally, Professor Schumpeter says that, if people will state their real objectives, economists can tell them what should be done. This seems to me an overstatement. Suppose, for example, that a federal monetary authority favors an anticyclical fiscal policy but believes so strongly that the budget should be balanced over a major cycle that it opposes an antistagnation fiscal policy. Assume that recovery has been under way for several years as in the middle thirties, but that there is still much unemployment. Could Professor Schumpeter tell the authority when to shift from deficit to surplus so as to balance the budget over the cycle? I should probably trust his diag-

nosis as fully as that of anyone I know but I believe the odds are against his forecast proving correct. Perhaps he meant his statement to be taken only in a broader sense. In any event I share his view that policy makers can profit by taking counsel with economists.

GARDINER C. MEANS: We are all familiar with the "economic interpretation of history." I want to speak of Dr. Smithies' paper as a fiscal interpretation of history, for it suffers from the same kind of defect. It leaves out of account what does not fit the theory.

The biggest single omission is the lack of discussion of monetary policy (other than devaluation) and the effects of changes in the stock of money outstanding. Yet there was important action in this field. The government pursued monetary policies between 1929 and 1933 which brought about a reduction of the money stock of 8 billion dollars, or more than 25 per cent. In contrast the New Deal adopted a policy of monetary expansion, bringing about an increase in the stock of money of 14 billion dollars, or over 50 per cent. In our economy, which functions on the basis of money, you cannot increase the money supply by over 50 per cent and have no significant effect. Yet Dr. Smithies has neither mentioned these major changes in his analysis of the thirties nor shown that they are irrelevant.

Actually it would be about as easy to "explain" the level of employment statistically by changes in the stock of money and in the demand for money as by fiscal changes. A decline in the rate of money expansion just preceded the start of the big depression and actually contraction and declining activity went together. Likewise, in recovery, monetary expansion and increased activity went hand in hand with certain exceptions which are consistent with our knowledge of changes in the demand to hold cash. Statistically, as good a case can be made for a monetary as for a fiscal explanation. Or rather, the fiscal explanation is no better *and no worse* than the monetary.

Of course I do not believe that a monetary interpretation of history would be more valid than a fiscal interpretation. The problem is larger than either though I suspect that the monetary has a great deal to do with it. What I am immediately concerned with saying is that Dr. Smithies has given no weight to the major changes in monetary policy and money stocks and that I believe this omission invalidates both Dr. Smithies' major conclusion and much of his analysis. I do not believe he has established "that fiscal policy is the one major instrument for recovery or stabilization in a free society." Nor do I believe that "the United States will have to make up its mind whether it wants to keep private enterprise or hold down the national debt." Theoretically, I believe either fiscal policy or monetary policy alone could produce stability; but in practice we need to use both, with major emphasis on monetary policy. Through the proper emphasis on monetary policy, we can avoid a policy of cumulative government deficits and yet maintain an economy of full employment. And I believe that the evidence of the thirties if properly interpreted would give support to this thesis. But my immediate object is simply to point out that the evidence Dr. Smithies presents is

subject to quite a different interpretation than that which he gives. Let us look at his evidence.

The evidence which he presents is to the effect "that, by and large, during the thirties both businesses and consumers were influenced in making their expenditure decision by the same factor in the same way as in the twenties." But can you say this if you look at money? In the twenties, businesses and consumers in the aggregate were willing to spend on consumption and investment the whole of the money they received as income provided their "cash on hand" amounted to about 30 per cent of their current income. In the thirties the business and consumer community was unwilling to spend the whole of its current money income even though it held cash on hand equal to half its current income. I submit that this was a major shift and that until it is properly explained, one has not established that businesses and consumers were influenced by the same factors in the same way as in the twenties. And though a part of the difference can be explained by lower interest rates in the thirties the bulk cannot be so explained. So far as I have been able to discover, there was a fundamental shift in the preference of the community to hold money as compared with spending it on consumption or investment goods. If this is true, it means we must examine Dr. Smithies' statistical reasoning more carefully for the two conclusions do not appear to be consistent.

The two main elements in his reasoning are based on evidence (1) that the behavior of businesses with respect to investment in the thirties fitted the same formula which it fitted in the twenties and (2) that the expenditure on consumption in the thirties bore the same relation to disposable income that it did in the twenties. In neither case do I question the evidence involved. I question only the reasoning which leads to the conclusion that the propensities to invest and to consume were stable because of this formula fitting.

I can make the illogic of this position clear most easily in the case of consumption. Dr. Smithies' reasoning assumes, like that of so many other economists, that the regression of consumption on disposable income represents the propensity to consume. Yet it would be perfectly possible to have a propensity to consume which fluctuated from time to time and still have the observations in the time series fall on a smooth regression line. This would be true, for example, if the propensity to invest were a constant. It would also be true if some third factor, say the stock of money outstanding, or the demand for money influenced the propensity to consume and the propensity to invest so that when the stock of money outstanding was high the propensity to invest and consume would be high and when low both propensities would be low. Until these possibilities have been eliminated we cannot accept the time series regression of consumption on disposable income (whether in the aggregate or per capita) as representing the propensity to consume. Some analyses which I have made suggest that if either the investment propensity or the consumption propensity is stable, it is *more* likely to be the investment function. But probably neither is stable. And if the regression of consumption on income does not represent the

consumption function then much of Dr. Smithies' evidence to support his exclusive fiscal theory falls by the wayside.

Two recent developments give added weight to the skeptical attitude I am displaying toward this fiscal theory, one in the field of statistical analysis and the other in the field of forecasting. Recent efforts to construct statistical statements of the investment function have produced formulae which give unacceptably high multipliers if the regression of consumption on disposable income is accepted as representing the propensity to consume. One worker whose analysis of investment produced an extravagant multiplier concluded that his statistical analysis must be wrong. He did not even consider the possibility that his theory was wrong.

The other development, that in the area of forecasting, involves the gross underestimates of employment after the war which have been made by many of the protagonists of the exclusive fiscal theory. The forecast of only 46 million employed in the last quarter of 1945 is belied by the actual figures of 51, 52, and 52 employed in October, November, and December. The error in the forecast arose primarily from adherence to the Keynesian assumption that consumer expenditure is a relatively stable function of disposable income. Actually it turned out that while disposable income went down somewhat consumer expenditure on nondurable goods went up by over 10 per cent.

It can be argued that this major departure from the prewar relation of nondurable goods demand to disposable income is a temporary matter resulting from the peculiarities of the transition. It is clear that returned veterans have to restock their wardrobes. The reduction of war tension and war restraint can produce a temporary splurge of spending. Certainly some of the increase in the demand for nondurables comes from this source and must be considered temporary. But is it all temporary? It seems to me likely that an important part is not. Indeed, last summer it was my opinion, as many in Washington can testify, that nondurable demand would increase considerably, relative to disposable income, when the war came to an end, partly because of the temporary factors already mentioned and partly because the huge cash balances and other liquid assets held by the community would have the more or less permanent effect of increasing the propensity to consume. The possession of large cash balances would lead to the spending of a larger proportion of current income on consumption, including the consumption of nondurable goods. This is an effect which is independent of the heavy backlog of demand for durable goods. Since I have taken this position, I naturally interpret the increased propensity to consume as being more than temporary. Indeed I do not think the full rise in the propensity to consume has yet expressed itself. Many nondurable goods are not available in the quantity or in the quality which is wanted. If there were not serious limits on the supply of nondurables at present prices, I believe that nondurable sales would increase considerably relative to disposable income, and only a part of the increase would be of a temporary character.

We will have to wait—perhaps a number of years—before we can be sure that there has been a significant and continuing upward shift in the pro-

pensity to consume. It is my prediction that events will show such an increase. If this prediction is vindicated it would seem to me pretty clear evidence that the propensity to consume is not fixed but is affected by the volume of money outstanding and can be increased or decreased by increasing or decreasing the total stock.

I have gone into this matter of the employment forecasts in some detail because a very basic issue appears to be involved. If the propensity to consume can be increased by an increase in the real money supply, the Keynesian theory of employment *cannot* be valid and the contribution which monetary policy can make to a program of economic stability is very much greater than the Keynesian theory would indicate. Even a secular tendency to oversave could be overcome without a continuing government deficit. In this case, a fiscal interpretation of history might have to give way to a monetary interpretation or a blend of the two in which monetary elements were dominant.

THE CHANGING STRUCTURE OF THE AMERICAN ECONOMY

SHIFTS IN THE GEOGRAPHICAL AND INDUSTRIAL PATTERN OF ECONOMIC ACTIVITY

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The second World War brought unprecedented controls over the American economy. At the same time, and to a considerable extent as an incident to these controls, the economy of the country has been subject to unusually searching observation and measurement. Some of our most useful types of information, such as the data provided by the Census of Manufactures, have not been available. Nevertheless, the files of governmental agencies contain much detailed information on what has been happening during the last few years, and the research arms of these agencies have made many studies of the effects of war on the economy. Although the bulk of this material is not available to the public, a number of valuable and interesting studies have been published, either by the government or by economists who have been working in the government service, and who are therefore familiar with the studies that have been made and with the data that have been collected. What is to be said here is necessarily based on the information that has thus been published.

In the last few years it has become very much the fashion to describe the functioning of the economy in terms of the gross national product and its components, and to consider the prospects for various future levels of economic activity in terms of estimates of demand for consumption and investment. If it is found that estimates of prospective demand for consumption plus private investment forecast a national product smaller than that needed to provide full employment, suggestions are usually made for a fiscal policy designed to eliminate the deficiency in demand. There is a related type of model making which considers the future labor force and the prospects which the different types of economic activity hold out for its employment. Estimates are made of the numbers who may expect to find employment in manufacturing, trade, services, construction, transportation, mining, etc. Although the common method of doing this is in terms of the number of jobs, it is also useful to obtain a view of the industrial structure in terms of the contributions to the national income made by the different industrial categories.[1]

[1] The above approaches have been combined in the study by S. Morris Livingston, *Markets After the War*, Senate Doc. No. 40, 78th Cong., 1st Sess.

On Chart 1[2] the increase between 1939 and 1943 in the contributions to the national income of each of the industrial categories is compared with the contribution attributed to that category in 1939. National income in the later year was slightly more than twice what it had been in the earlier year. From this chart it is possible to obtain a conception of the magnitude of the actual increases in contribution to the national income, since the points are plotted on an arithmetic scale. An idea of the relative increases may also be obtained from the sloping background lines each of which represents a certain percentage increase. The contribution of manufacturing, for example, increased almost 180 per cent, while that of public utilities increased less than 20 per cent. The heavy sloping line represents the percentage increase of total national income in 1943 over 1939. Consequently all categories above this heavy line increased proportionately more than the average for all categories, and those below the heavy line increased less. In dollar terms the income originating in every category increased between these two years. The change in the industrial structure, however, is shown by the changes in the percentage contributions of the different industrial categories to the total national income.

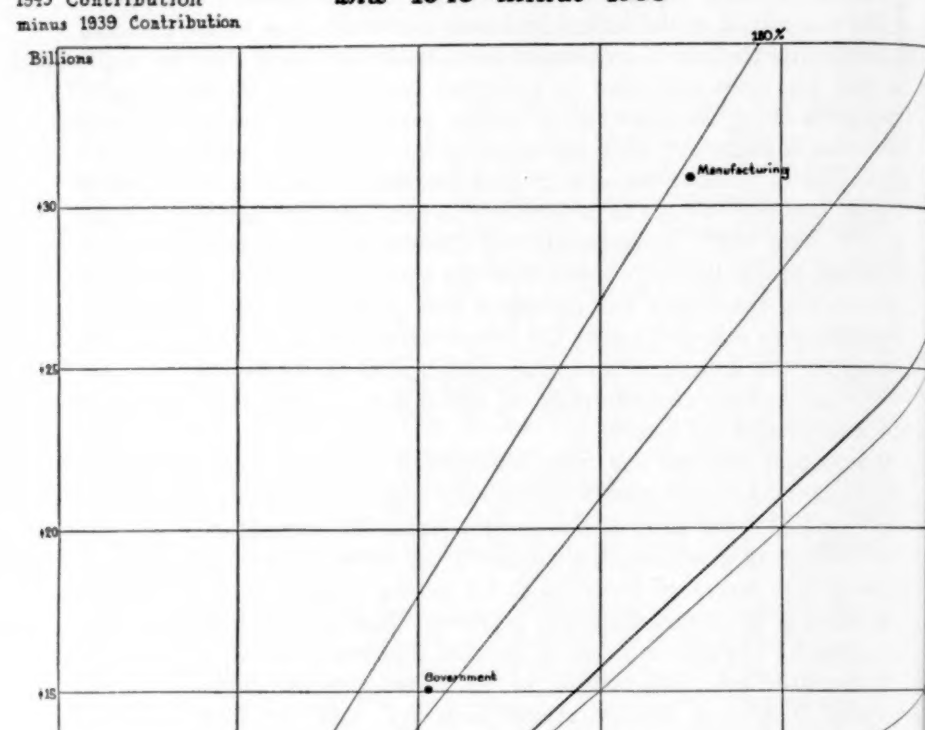
The major change has been the greatly increased importance of manufacturing, which contributed 24 per cent of the national income in 1939, and 32.5 per cent of the greatly expanded income of 1943. The contribution of government increased from 14 to 17 per cent. Agricultural income increased from 7.4 to 9.5 per cent, and the proportionate contribution of construction also increased slightly. When adjustments are made for changes in prices it appears that the relative contribution of agriculture and construction in real terms actually declined during the war, but that transportation increased, and the importance of manufacturing was even greater than is indicated by the figures given in current prices.[3]

The wartime structure of economic activity involved greater emphasis on manufacturing, government, and transportation. The shift to manufacturing was the most significant change, and the only one which went far beyond any previous experience. The estimates of the industrial origins of national income made by Simon Kuznets make it possible to compare the contributions of the different industrial categories from 1914 to 1943.[4] A study of these data reveals that manufacturing was the only industrial category which during the war was the origin of a greater proportion of the national income than at any time since 1914. Even

[2] Source: Simon Kuznets, *National Product in Wartime*, p. 106.
[3] Simon Kuznets, *National Product in Wartime*, p. 111.
[4] *National Income and Its Composition, 1919–1938*, Vol. I, and *National Product in Wartime*, p. 106.

CHART 1

Origin of National Income by Industrial Categories : 1939 *and* 1943 minus 1939



government income payments had not reached the 1933 proportion by 1943, and in the latter year only slightly exceeded the 1938 proportion. Agriculture, mining, construction, and transportation all contributed a lesser share of the total than in the twenties. During the war the shares of the service and miscellaneous category and of trade declined. The remarkable expansion in the importance of manufacturing was clearly the outstanding change in the industrial structure of our economy during the war.

The fact that the tremendous increase in national income during the war was associated with an even greater relative increase in manufacturing production raises the question whether a high national income can be maintained if the income payments attributable to manufacturing sink back to their prewar proportions. No attempt will be made in this paper to present estimates of the probable postwar structure of economic activity either in terms of numbers employed, or in terms of contribution to the national income.[5] A few comments may be made, however, as to the probable industrial structure in the near future. Income payments by government will be lower. Little increase is to be expected in agricultural income and employment, and substantial additions to income are unlikely to come from mining, transportation, or public utilities. There has been much discussion of the postwar construction boom, and employment in the construction industry will undoubtedly expand greatly. But construction at its peak employed less than 5 per cent of the total labor force, while manufacturing in 1943 employed 27.9 per cent of the total.[6] It would require a large relative expansion in construction to compensate for a relatively small percentage decline in manufacturing employment. A reasonable estimate of the proportion of the national income which could be provided by construction over a considerable postwar period seems to be approximately 10 per cent.[7] Such a proportion at a high employment level would mean a sizable increase in construction employment, but would not be adequate to fill the gap left by an appreciable decline in manufacturing.

The service industries showed rapid growth in the twenties, and it might appear that they offer the prospect for large postwar employment. Edward F. Denison has shown, however, that the relative expansion in the service industries during the twenties was contrary to a downward trend which had prevailed since 1870, and on the basis of a

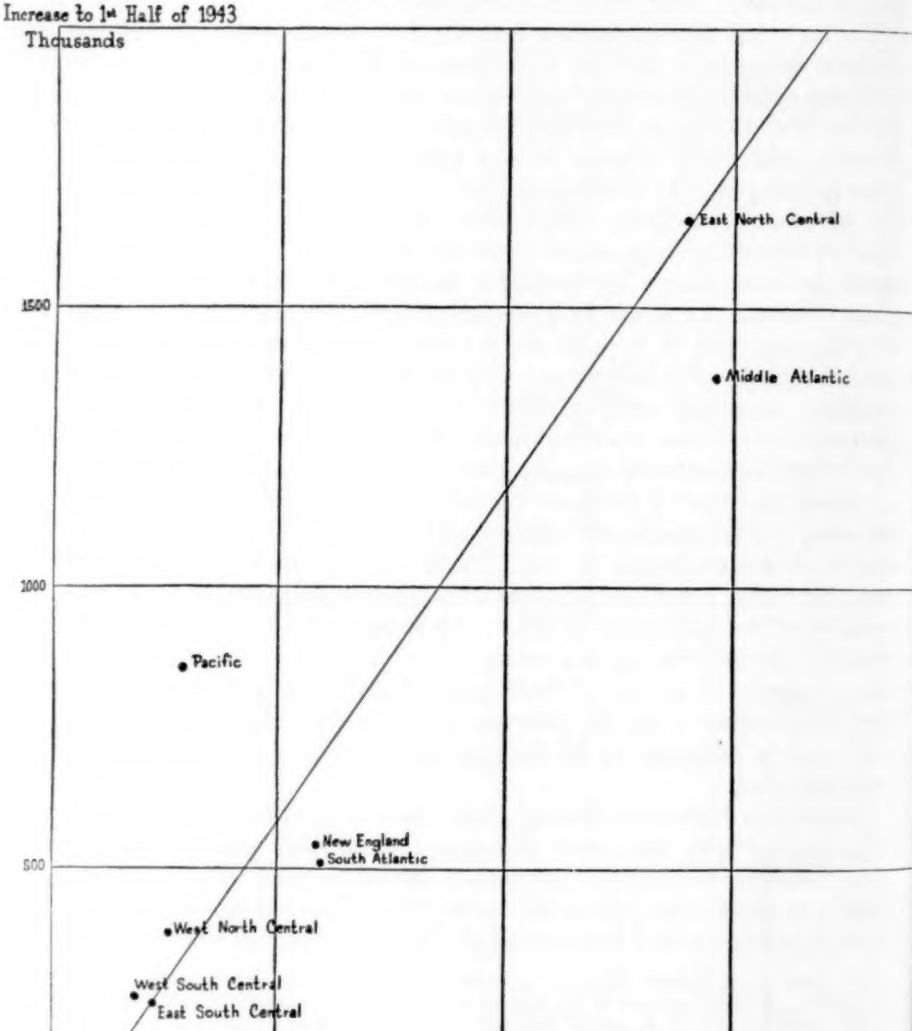
[5] The most widely known discussion in terms of employment is Henry Wallace's *Sixty Million Jobs*. Another estimate of the postwar composition of the labor force is to be found in War Production Board, Bureau of Planning and Statistics, *Regional and Industry Impacts of War Production*, Part A, p. 72.

[6] Simon Kuznets, *National Product in Wartime*, p. 109.

[7] Cf. Robinson Newcomb, "Can the Construction Industry Carry Its Immediate Share of Postwar Employment?" *Review of Economic Statistics*, Aug., 1945, pp. 117–132.

CHART 2

Manufacturing Employment by Census Regions 1939 and Increase 1939 To First Half of 1943



detailed analysis he concludes that employment in the service industries is not likely to increase greatly from present levels.[8] Employment in trade, finance, and miscellaneous categories will increase, but it seems doubtful that this expansion will be great enough to maintain a high national income unless manufacturing employment is considerably above prewar levels. Such a highly industrialized economy is possible only if income distribution is such as to provide mass markets for manufactured commodities in quantities greatly above anything we have known in the past.

The wartime expansion of manufacturing did not apply to all branches of manufacturing equally, but was necessarily concentrated in the production of the commodites most essential to the prosecution of the war. These were mainly machinery, transportation equipment, and other metal products. Of the war supply contracts exclusive of foodstuffs let by the government through November, 1943, 88 per cent were for metal products and 60 per cent were for aircraft, ships, and combat and motorized vehicles. Only 4 per cent were for chemicals, including coal, and less than 8 per cent were for "soft goods" such as clothing and bedding.[9]

As we shift back to peacetime production it is inevitable that the emphasis on metal products should decline. Here again, however, it seems unlikely that we shall return to the prewar structure. The income originating in the manufacturing of metals, machinery, and transportation equipment was approximately 28 billion dollars in 1943, as compared with about 6 billion dollars in 1939. It appears doubtful that we can maintain high income levels if the proportion of income from this source were to return to its prewar figure.[10]

The major industrial development of the war was the tremendous expansion in manufacturing, largely confined to metal products. Consequently, the significant geographical shifts in economic activity were largely the result of the great increase in the production of metal and its products. The shifts in the geographical structure of manufacturing as shown by employment are presented in Chart 2.[11] In this chart the increase in manufacturing employment between 1939 and the first half

[8] "Service Industries—Trends and Prospects," *Survey of Current Business*, Jan., 1945, pp. 11–20.

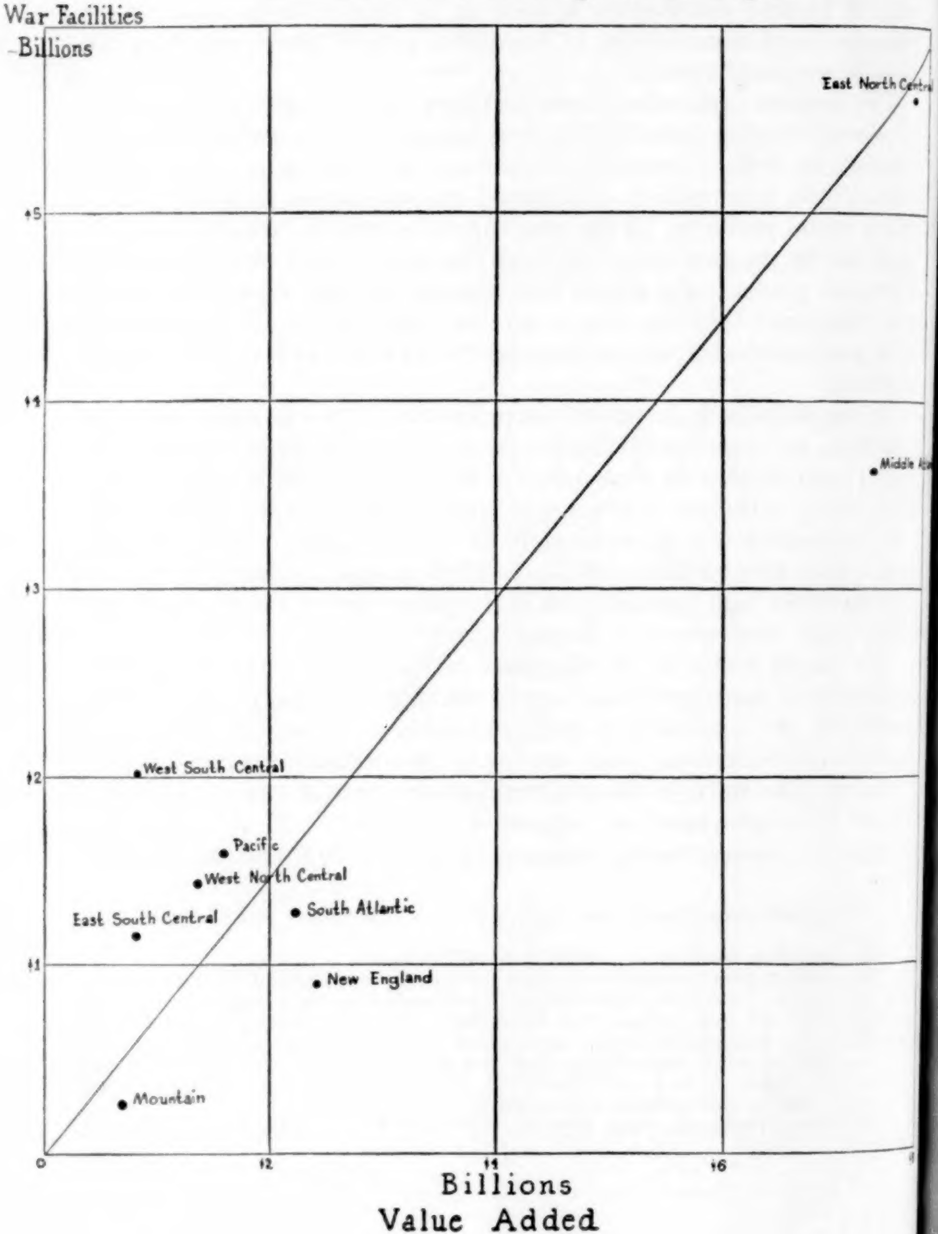
[9] War Production Board, *op. cit.*, Part A, p. 3, and Part B, p. 3.

[10] One estimate gives an expected shrinkage in manufacturing wages of $10 billion arising from elimination of overtime, redistribution of employment to lower wage manufacturing industries, and reduction of man-hours of employment in manufacturing even if there is relatively full employment in the economy as a whole. This estimate calls for production from war industries for civilian use five times their 1944 output of civilian goods, and double their 1939 output. Elmer C. Bratt and Clarence H. Danhor, "Components of Wartime Wage Changes," *Survey of Current Business*, Sept., 1944, pp. 17–20.

[11] Source: War Production Board, *Regional and Industry Impacts of War Production*, Part B, p. 31.

CHART 3

Value of War Manufacturing Facilities Authorizations Through October 1943 and Value Added by Manufactures, 1939, by Census Regions



of 1943 is compared with employment in 1939 by census regions. Positions above the heavy line indicate increases in manufacturing employment at a rate in excess of the national average; positions below the line indicate increases by proportions less than the national average. It may be seen at once that the greatest increases in manufacturing employment occurred in the two major industrial regions—the East North Central and the Middle Atlantic. The increase in employment in the East North Central region amounted to almost 1,700,000 employees, and was at a rate slightly above that for the nation as a whole. Manufacturing employment in the Middle Atlantic states increased by 1,400,000, considerably more than any region other than the East North Central. Relatively, however, the Middle Atlantic region lost ground.

The most striking relative shift was the increase in manufacturing employment in the Pacific Coast states. This increase of 860,000 employees was 148 per cent of 1939 manufacturing employment, which may be contrasted with a national increase of just under 59 per cent. The bulk of this increase came in California, where manufacturing employment increased by 172 per cent.

In summary, the geographical structure of manufacturing as revealed by data for employment retained the basic characteristics of prewar. The Atlantic Coast regions lost ground relatively. The Central regions gained slightly, and the Pacific Coast states, strikingly. For the most part the trends followed the prewar pattern, greatly accelerated for the Pacific region.

The war resulted in a great expansion in industrial plants and equipment, an expansion which added facilities valued at 20 billion dollars to the 60 billions worth of manufacturing facilities in the country.[12] The geographical distribution of these new facilities gives an idea of the shifting potentials for production of manufactured products. In Chart 3[13] war manufacturing facilities authorized through October, 1943, are compared with value added by manufactures in 1939 by census regions. Again it may be seen that the two major industrial regions expanded more than other regions since they obtained the largest additions of new facilities. In general, the Atlantic Coast regions again lost ground relatively while the East North Central region just about held its own. The East South Central and Western regions generally obtained new facilities out of proportion to value added in 1939. The relative increase in facilities was especially pronounced in the West South Central region.

[12] Glenn McLaughlin, "Regional Problems of Industrialization," *Economic Reconstruction*, Seymour E. Harris, ed., pp. 164–165.

[13] Source: War Production Board, *op. cit.*, Part B, p. 18.

The continued effects of these new facilities on the pattern of industrial activity depends on their usefulness for postwar production. It appears that the factories in the Northern manufacturing section have on the whole a good chance for conversion, while a high proportion of the plants in the South and West consist of special-purpose facilities such as shipyards and explosives plants, or are not favorably located for peacetime markets.[14] The less highly industrialized sections of the country also stand to lose disproportionately because of the lack of a coherent program for disposal of government-owned war facilities. Aluminum and iron and steel plants may be cited as examples. Several of these plants located in areas where production of metals had previously had little or no development, have generally poorer prospects of survival than similar plants situated in the older established manufacturing areas. It is also not at all certain that governmental policies with respect to these facilities—a large proportion of which have been constructed with the use of public funds—will have the effect of promoting their maximum postwar use; and it is quite certain that in many instances powerful private interests oppose their full utilization in regular peacetime production. The delays and uncertainties which result from these conflicting pressures lessen the prospects for the realization of the full postwar potentials, not only of the plants, but of the organizations which have been developed to operate them.

One cannot escape the conviction that the postwar pattern of industrial activity will display considerably less departure from that before the war than would at first glance be indicated by the relative shifts in manufacturing employment, or even by the less pronounced wartime tendency toward dispersion of manufacturing facilities. The Great Lakes states will emerge from the reconversion stronger industrially than ever before. There is evidence of a relative decline in the Atlantic seaboard states and a relative increase in the industrial importance of the rest of the country, particularly the South Central and Pacific regions.

The changes in employment which resulted from the expansion of manufacturing activities and from the construction and operation of military installations resulted in the largest migration of persons within the country that has ever occurred in a similar length of time. The total migration is not known, but estimates are available of the net migration from April, 1940, to November, 1943. During this period of three and a half years, thirty states lost 3,400,000 civilians through migration to other states. This may be compared with the 1,400,000 people who moved from twenty-eight states to other states in the five years, 1935–40.[15]

[14] *Ibid.*, pp. 171–175.

[15] Hope Tisdale Eldridge, *Interstate Migration and Other Population Changes 1940 to 1943* (Census Bureau, Series P-44, No. 17), p. 1.

The outstanding migration phenomenon was a net migration in these three and a half years of about 1,400,000 persons to California. The regions receiving migrants were the Pacific Coast states plus Utah, Nevada, and Arizona, the East North Central states with the exception of Wisconsin, and a group of Atlantic Coast states which includes Florida, Virginia, District of Columbia, Maryland, Delaware, New Jersey, Connecticut, Rhode Island, and Massachusetts.

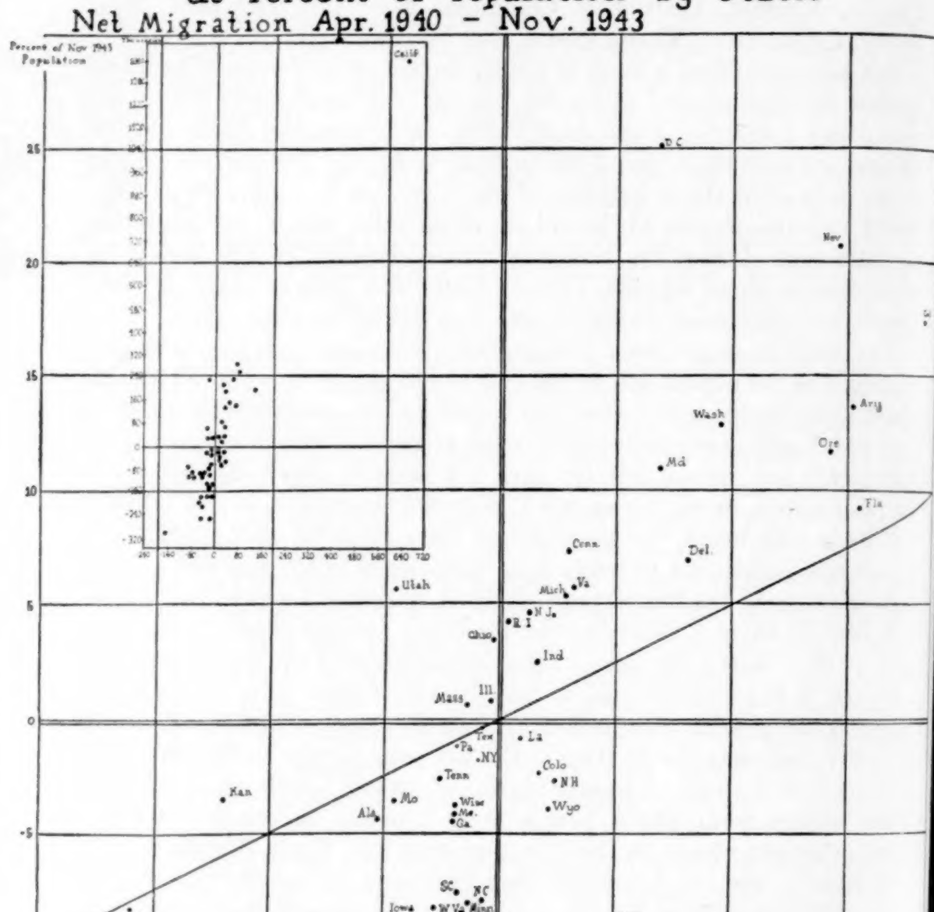
In Chart 4 an effort is made to depict the nature of the war migrations against the background of prewar trends. The small insert shows the actual net migration from April, 1940, to November, 1943, plotted against net migration from 1935 to 1940 by states. The purpose of this insert is to show the magnitude of the migration to California as compared with the movements in and out of the other states. The migration to California during the war was an acceleration of the heavy in-migration of about 665,000 persons in the five prewar years. It completely overshadowed the migrations in or out of the other states.

The main body of Chart 4 presents the net migration figures as percentages of the population at the end of the period covered. From this chart it is possible to see where the pressures for emigration are greatest and which areas are relatively the most attractive. Where in three and a half years one person left for each 5.4 persons who remained, as in North Dakota, or one for each 6.1, as in South Dakota, or one for each 6.5, as in Oklahoma, the pressures to leave must be very strong. And where one person out of every four has arrived in the last three and a half years, as in the District of Columbia, or one in 4.9 as in Nevada, or one in 5.7, as in California, the tendency toward expansion is very great.[16] On Chart 4 the heavy tilted line represents equal proportionate changes in the two periods. It may be noted that those states which enjoyed net in-migration in both periods all gained a higher percentage in the shorter war period than in the five-year prewar period. With the exception of Kansas, this accentuation of prewar trends also applied to those states from which people were moving. Reversal of prewar tendencies was shown in the war migration into Utah, Massachusetts, and Illinois, and the migration from Louisiana, Colorado, New Hampshire, Wyoming, New Mexico, and Idaho. In general, accentuation of trend is the predominant pattern. In part this may be attributed to war stimulation of industrial developments in areas generally expanding, and the associated widening of wage differentials, which attracted people from areas of diminishing economic opportunities or of high natural rates of population increase. In part it comes from somewhat fortuitous location of war administration as in the District of Columbia, or of large military installations, as in Arizona.

[16] The actual proportion of newcomers is higher than the figures given because these figures are based on net migration. When the net movement is estimated, each older inhabitant who leaves the state cancels one new in-migrant.

CHART 4

Net Migration 1935-40 and Apr. 1940 - Nov. 1943 as Percent of Population by States



Percent of 1940 Population

Net Migration 1935-40

Another striking wartime population movement has been the migration away from the farm. Between 1940 and 1944 the average net loss from the farm population of persons fourteen years of age and over was 1,290,000 per year. This may be compared with a net loss through migration for persons of all ages of 375,000 per year between 1930 and 1940, and of 630,000 persons per year between 1920 and 1930.[17] A proportion of this loss of farm population was due to inductions and enlistments into the armed forces. It is clear, however, that military service claimed less than half of those leaving the farm, and that there was, therefore, a very great speeding up of the movement away from farms during the war.

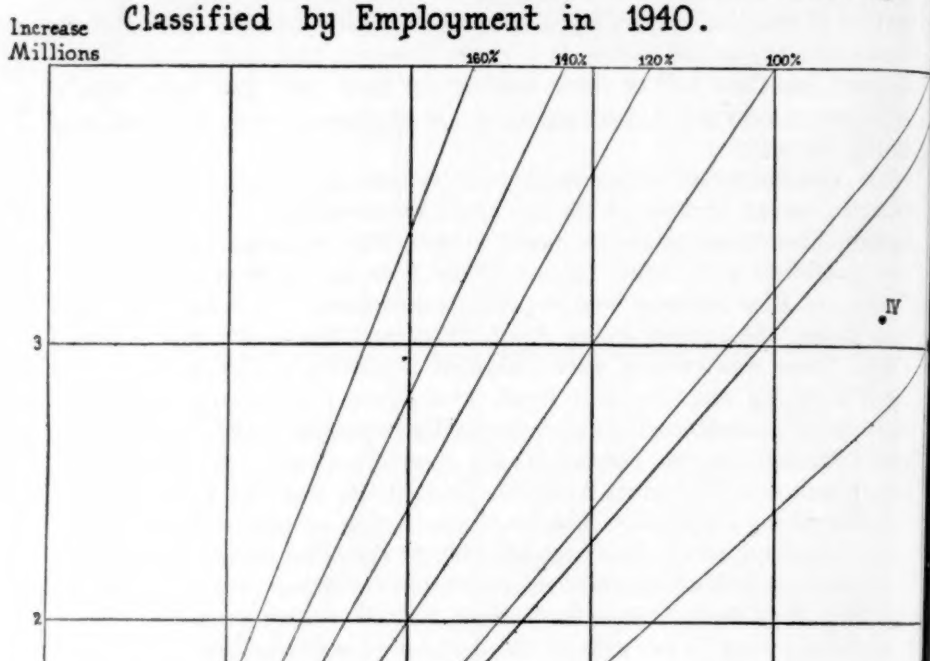
The concentration of American industry into large centers has lately caused concern because of the apparent vulnerability of concentrated metropolitan areas to atomic bomb attack. The Department of Labor has published a bulletin, *Impact of the War on Employment in 181 Centers of War Activity*, which presents estimates of employment on four dates, the earliest being April, 1940, and the latest September, 1944. These war centers were classified according to the number of manufacturing employees in April, 1940, into four groups, and the increase in manufacturing employment by September, 1944, was computed for each group. The results are shown in Chart 5. The smallest group included 72 centers which in April, 1940, had less than 10,000 manufacturing employees. The total increase in employment in these centers by September, 1944, was 563,000. At the other extreme were the 15 centers each of which had over 100,000 industrial employees in 1940. By 1944 these large centers had added 3,105,000 employees. They accounted for over 52 per cent of the increase in manufacturing employment and the 33 centers in the two largest size classes accounted for 65 per cent of the increase in employment. The two smaller size centers, it is true, showed larger percentage increases in employment than the larger centers, but the increase in industrial activity was mainly concentrated in the great industrial districts.

It has been frequently asked whether the wartime migrants will stay in their new locations or return to their former homes. The answer obviously depends on the causes of their migration, and on relative economic conditions in the postwar period. If war industries shut down in the war boom areas and are not replaced by new activities, former places of residence will be relatively more attractive. But where migrants came from distressed areas they will often find unemployment in the new location preferable to unemployment in the former place of residence. If there is general conversion to peacetime industries in the

[17] U. S. Department of Commerce, Bureau of the Census, Release, Series Census-BAE, No. 4, June 19, 1945.

CHART 5

Increase in Manufacturing Employment, April 1940 to September 1944 in 181 Centers of War Activity Classified by Employment in 1940.



war centers and a generally high rate of employment, it is safe to assume that a considerable proportion of the migrants will remain in their new homes, and that the migration patterns of the past will continue. If a firm industrial base for these new populations cannot be found when war production collapses, a reversal of wartime population movements —or even prewar trends—is certain to occur. In any event the war has demonstrated the great—and probably increasing—mobility of the American labor force and has compressed into a short period of time migration which would have otherwise taken place much more slowly.

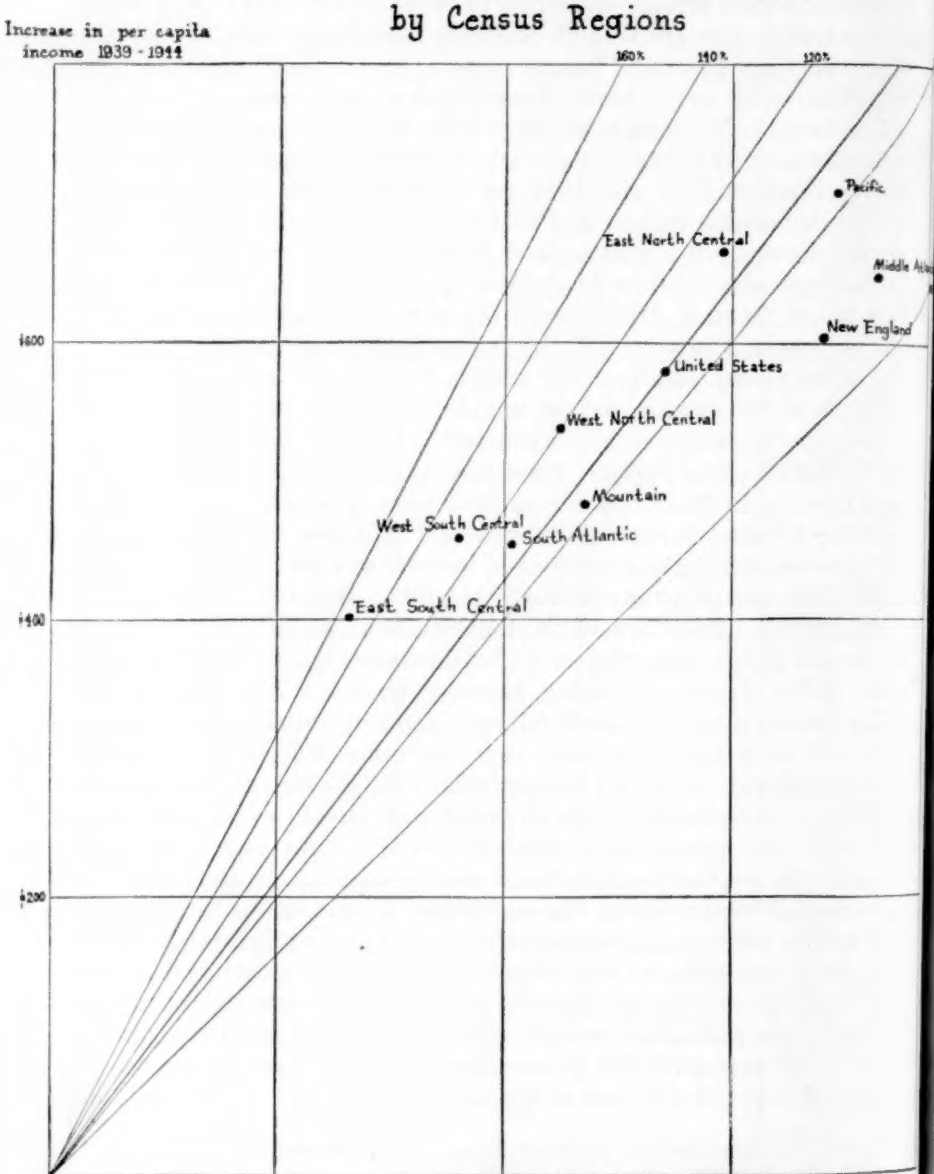
The best single measure of the effects of all the wartime shifts in economic activity is found in per capita income. Changes in per capita income between 1939 and 1944 are compared with 1939 per capita incomes by census regions in Chart 6.[18] Per capita income more than doubled for the country as a whole in these five years. In dollar terms the increase was greatest in the four high income areas—the Pacific, East North Central, Middle Atlantic, and New England regions. The last two named experienced the lowest percentage increases shown. The highest percentage increase came in the East South Central region, which, however, experienced the smallest increase in dollar terms. High percentage increases were also registered by the West South Central and West North Central regions. These large proportionate increases in per capita income in the low-income areas have been interpreted as working toward a leveling of regional differences.[19] It is true that if incomes in the lower-income regions continue to increase at a more rapid rate than in the high-income areas eventually the differences will disappear, and in the process inhabitants of the low-income states will be receiving a higher and higher proportion of the total national income. As long as the dollar differences are increasing, however, there is a very real sense in which the low-income areas are failing to catch up with the more affluent states. It is in any event clear that important differences in income persist, although per capita incomes more than doubled during the war.

What is the relation of this situation with respect to income to the industrial and geographical shifts discussed in this paper? In some measure the population movement was a migration from low-income areas to high-income areas. The movement did not persist long enough, however, to effect a noticeable reduction in income differentials. If the hypothesis is sound that high employment and a large national income can be achieved only by retaining a considerable measure of the increased industrialization brought about by the war, greatly expanded markets for manufactured goods must be found. The general rise in income should provide part of the increased demand. A raising of in-

[18] Source: U. S. Department of Commerce, *Survey of Current Business*, Aug., 1945.
[19] War Production Board, *op. cit.*, Part A, p. 65.

CHART 6

Per Capita Income 1939, and Increase in Per Capita Income 1939 to 1944 by Census Regions



comes in the low-income states would probably increase demand for manufactured products, even if it were attended by a decline in per capita incomes in the more prosperous states. The geographical pattern of industry brought about by the war does not contribute greatly to equalization of incomes, since its effect was generally to strengthen the industrial position of higher income areas. The degree of labor mobility achieved during the war, on the other hand, is a dynamic factor which may have profound effects on our future economy. If internal migration continues on the wartime scale, regional differences in income will be rapidly reduced, and this should contribute to the expanded demand for manufactured goods which seems to be necessary if we are to continue to enjoy a large national income.

THE EFFECTS OF THE WAR ON THE STRUCTURE OF COMMODITY AND LABOR MARKETS

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In meeting the economic requirements of modern war the government found it necessary to fix nearly every price, set up a complete system of wage controls, and for many commodity areas direct what was to be produced and by whom and to whom it was to be sold. At the same time, and within the limits of controls which were far from all-inclusive, consumers, labor, and business adapted their prewar conduct to conditions of unprecedented incomes, job opportunities, profits, and scarcities. Certainly our country cannot go through such an experience and go back, if it would, to its prewar market structures unmodified.

In examining the effects of the war on market structures the central interest is in the extent to which price-making and wage-making are governed by a high degree of oligopoly and monopolistic competition from the selling side or the comparable features from the purchasing viewpoint. In addition, the analysis should include factors which contribute to the degree of promptness and accuracy with which adjustments in supplies and purchases are made so that prices and wages will quickly and precisely reflect the market forces at work.

I. *Commodity Markets*

The wartime controls of commodity markets were designed, within the limits of the basic objectives of those controls, to disturb as little as possible the business practices and policies of established firms. This control policy is illustrated by the limited use of wartime concentration of production and in the provisions of such concentration plans as were invoked[1] in provisions of war contracts,[2] and in allocations made on a basis of historical volume. In a similar fashion, OPA used "freeze" instead of uniform prices where sellers had significantly different prices, and undertook to protect processing and distributing margins against undue increases in buying prices so that ceiling prices would be "generally fair and equitable."

[1] Cf. Charles A. Meyers, "Wartime Concentration in Production," *Journal of Political Economy*, Vol. LI, No. 3, pp. 222–234.

[2] For some time after Pearl Harbor war contracts were highly concentrated in large firms. (Cf. W. C. Ballaine, "How Government Purchasing Procedures Strengthen Monopoly Elements," *Journal of Political Economy*, Vol. LI, No. 6, pp. 538–546, for an explanation of the tendency for governments to contract with but few firms even in peacetime.) Hundreds of small metal using plants did have difficulty in transferring from civilian to war production. This situation was improved by an aggressive subcontracting program, and by definite efforts to give prime contracts to small plants. (Cf. *Sixteenth Report* of the Smaller War Plants Corporation, p. 3).

Aside from government controls, the war changed the pattern of civilian production, gave consumers unprecedented incomes, made sales manpower and gasoline for their work scarce, put advertising space at a premium, made high quality products scarce in some fields, raised raw material and some processing costs but not selling costs, brought unprecedented earnings and a desire to minimize the heavy taxes, and altogether created a unique environment to which business managements adjusted themselves as they were forced or allowed by the exigencies or opportunities of the moment, but often with a greater weight given in decisions to postwar position for the struggles of that coming period.

1. The sharp decline in the birthrate of new firms during the war, concentrated as it was in the distributive and service trades and in manufacturing for the civilian market, was the logical result of the high wages and the draft and of the shrinking civilian economy of a nation at war and was not the result of culpable discrimination in the policies, although sometime in the administration, of the war control agencies. Actually the problems of the new firm under wartime controls were chiefly those of knowing what to do, making necessary applications, and waiting for the hastily-erected agencies to grind out the answers.

The heavy withdrawals from business from 1941 to 1943, occurring chiefly in the service and distributive trades, were largely voluntary, or at least few were forced out by bankruptcy. Some entrepreneurs were lured into the role of wartime wage earners, others were drafted, and some did not want to fight for volume in a period of shortages.

2. Few sellers whose market position was weak before the war were able to strengthen that position during the war although, as is noted later, most firms were able to improve their financial condition. Few sellers whose products did not enjoy wide consumer acceptance prior to the war were able to widen that acceptance through organized merchandising campaigns. Furthermore, in most cases in which higher sales cost made higher ceiling prices desirable or where the seller wished to change price bracket to that of well-known brands in order to give the appearance of quality—an old merchandising technique—OPA did not allow a seller to raise his ceiling from the relation it occupied to other sellers' prices in the freeze period.

3. In those commodity fields in which brand names are important, the wartime earnings and effect of the war on postwar market position of particular firms varied according to the peculiar combination of cost movements, type of OPA ceiling prices applied, degree of scarcity of the product, and ease with which volume can be shifted among brands. Consumers with wartime incomes swung their buying toward what they considered to be quality which usually meant toward well-known

brands, and postwar merchandising will give these new customers little chance to drop this buying habit. Often manufacturers could and did, as in the cases of beer, margarine, family flour, and smoking tobacco, shift volume from second brands or private label sales to their first label. Less well-known brands were frequently withdrawn from the market as a result and private label sellers had difficulty in obtaining goods to sell under their labels. Thus the portion of the market held by preferred labels, usually manufacturers' brands, was increased and at the same time the owners of these brands were better able to withstand rising factory costs, as in pancake mixes, to hire scarce manpower, and to bid up uncontrolled raw material prices, as in the wine industry. A still more acute situation arose in the case of commodities which were not scarce, where owners of little-known brands suffered a decline of volume, such as in family flour and in economy brand cigarettes before 1944, the effect of which was sometimes aggravated by a rise of both raw material and processing costs.

While all of this was going on there was, for reasons noted above, only limited opportunity for little-known brands, even of scarce commodities, to climb the market-prestige ladder. In contrast, manufacturers with established brands whose volume of civilian sales was cut by diversion of materials to war uses, as well as those who kept up or enlarged their civilian volume, advertised lavishly even when the advertiser had little or nothing to sell and certainly could not supply the current demand. The allowance of liberal advertising outlays for peacetime products as costs on war contracts and as costs before heavy wartime taxes encouraged such expenditures. After having fastened their products in the consumers' minds, the established firms have unprecedented reserves and liquid assets and, if necessary to use them, tax refunds, which form a "war chest" with which to fight interlopers, as well as each other, in the postwar struggle for market position.

When one looks for developments adverse to established brands, the points are significant but rarely governing. In spite of the furor raised about disregarding brand differentials in setting ceiling prices—a policy rarely followed by OPA where such differentials were sizable—owners of well-known brands suffered neither financially nor in market position because of having no higher prices than competitors. Rising wartime costs were for raw materials and processing; selling costs fell. At the same time consumers rushed to buy the often-enlarged volume sold under well-known brands, particularly when their prices were the same as for unknown brands. Even where there was a general deterioration of the quality of a commodity, as with gasoline, done with or without OPA approval, well-known brands did not seem to lose prestige for consumers had a lower basis of comparison. Where scarcities were acute

and consumers had to take new brands of scarce commodities, they did so under protest, and it is doubtful whether buying habits can be formed that way. In those cases where the consumer reaction was favorable, the owners of such brands were not able to turn chance purchases into a buying habit by means of well-planned merchandising campaigns.

As we look ahead we see that many new promotional campaigns and new brands will be coming out during the transition period, some of which are only established brands being put on new lines. There is serious doubt, however, concerning the progress that little-known or new brands can make against the entrenched and war-strengthened position of established brands.

4. For other reasons than the strengthened position of their brands, the established firms, with emphasis on the large firms, came out of the war in an excellent condition to engage in the production and marketing of the postwar era. The bulk of the usable private wartime industrial construction and equipment is in the hands of the large firms and they leased during the war and have first claim on many of the usable plants built by the government.[3] Some firms who were waning before Pearl Harbor, waxed again in the all-out production program and have acquired a fund and perhaps an organization with which to give a good account in peacetime. Large corporations paid off their debts, built reserves, and improved their cash position markedly in spite of the wartime taxes.[4] Firms with war contracts seem to have been able to carry ahead the basic research and often the civilian product research which will go far to determine success in the "new product" business of the postwar era. Likewise such firms, even when heavily or exclusively engaged in war production, have kept their basic factory organization and sales and distributing organization for civilian products. Then, as during the war, large business is showing during the transition period of scarcities greater skill and power in acquiring scarce materials and equipment than is small business, except in those limited areas in which the restrictions of the Civilian Production Administration allocate such scarce articles to all users or give priorities to small firms.

In a limited number of circumstances, chiefly where enforcement of wartime controls was difficult and entry of new firms was easy, established business suffered.

5. The war resulted in a net change toward both horizontal and vertical concentration in manufacturing. Within manufacturing, production has shifted to plants employing more than a thousand persons.

[3] Cf. *Eighteenth Report of the Smaller War Plants Corporation*, pp. 7–9.

[4] Cf. study by the Securities and Exchange Commission, *Working Capital of Registered Corporations, December 1939–June 1945*, released Dec. 5, 1945.

Totals on this subject are striking but misleading for they reflect chiefly the shift of employment to the metal-using industries, which by nature are large scale. However, even within these industries, and within industries where small firms are important as well, there was distinct shift of employment toward the larger plants which was only partially explained by the increase of total employment. The rate at which vertical and horizontal mergers and consolidations occur was twice as high in 1944 and four times as high in the closing months of 1945 as in the prosperous year 1941.[5] A cursory examination of particular transactions as reported by the Senate Small Business Committee[6] shows that most cases involved at least one medium-sized or large firm who apparently was seeking to round out a line of consumer goods, or acquire sources of raw materials or semifinished goods, particularly where such commodites were scarce and the flow was not fully controlled by the government. Casual observation also emphasizes these two types of cases and a third—that of downstream control in order to obtain the advantage of a margin provided by OPA at a later level. Such margins were the customary ones or margins apparently necessary for an autonomous operation, but in either case one that seemed to be attractive to an integrated operator in a sellers' market. All such influences tending toward integration were augmented by the ease of selling added volume under well-known brands, such as in the liquor field, and of raising funds and of building corporate surpluses, and by confidence in postwar prosperity.

6. In addition to the obvious bearing of the preceding discussion on the position of small business—referring chiefly to small firms in the absolute sense—there are other pertinent developments and considerations. On the one hand, the small businesses which remain after the war—and by far the most did survive—tend to be the stronger, better managed firms. A large portion of small businesses liquidated or sold out were the marginal firms, in the sense that they were but a means of self-employment and usually at not very good wages. In those commodity areas where supplies were very short, such as in the selling of household appliances, the survivors tended to be those that had done well in peacetime and who did not follow the lure of war wages or those that were adroit in adapting their business to wartime conditions. In addition, the financial position of the surviving small businesses is far better than prior to the war. Earnings rose more sharply[7] and have been

[5] Cf. a forthcoming special report of the Senate Small Business Committee for data supporting the conclusions in this paragraph. Data on mergers from 1939 through 1944 are contained in the *Sixteenth Report of the Smaller War Plants Corporation*, p. 17.

[6] *Progress Report*, No. 3, 1945, pp. 65–78.

[7] In the case of manufacturing the most comprehensive study appears to be that by F. C. Dirks, "Wartime Earnings of Small Business," *Federal Reserve Bulletin*, Jan., 1945, pp. 16–26.

retained in the business to a greater degree in the small than in the large firms.[8] OPA surveys have shown surprisingly high wartime earnings in trades which lost the bulk of their peacetime merchandise business but which offset the lost volume by the sale of used goods and of new lines and by service business. Furthermore, the earnings of small firms have usually been high in prosperous periods[9] such as the early postwar period promises to be.

On top of the war-end strong financial position of most small firms, we are in a period where the number of business firms, chiefly small firms, is growing rapidly. The basic reason lies in a reversal of conditions which led to the low birthrate during the war. A larger portion of peacetime manufacturing will be in industries where small firms have found entry easy and continued operation possible. The physical volume of many distributive trades will rise, and the service trades will attract thousands of small ventures.

Some of these new firms, a portion of whom are small only relative to other firms in their industry, are in a position to take advantage of technological and locational changes which are denied to old firms tied down by sunk capital. Advantages in costs resulting may offset for some the difficulties of entry into markets.

In contrast to the above optimistic considerations, careful weight should be given to the following possibilities which forewarn of trouble for new small manufacturers:

The problems of the transition period may bear particularly heavily on smaller manufacturing firms in those commodity areas in which new equipment and semifabricated parts and subassemblies are scarce. Here the buying power and skill of the large purchaser will count, except to the limited degree that the small firm is protected by priorities and allocations issued by the Civilian Production Administration.[10] In the struggle to get such equipment or materials from unusual sources of supplies, the buyer is not fully protected by OPA ceilings for current supplies and not at all against onerous provision in longer-term contracts. Furthermore, such firms may experience low volume for some

For manufacturing other indications are found in OPA's published studies of business profits. For the distributive trades see the Department of Commerce reports on earnings of unincorporated wholesalers and retailers, and Malcolm P. McNair's annual studies of department store operations, published by Harvard University.

In addition, OPA has made special studies of the earnings of independent food retailers, appliance dealers, automobile dealers, and small furniture stores, all of which show an excellent wartime earning record for small retailers.

[8] Cf. F. C. Dirks' "Wartime Financing of Manufacturing and Trade Concerns," *Federal Reserve Bulletin*, April, 1945, pp. 313–330. Somewhat less favorable data are shown for small metal products manufacturers in the National Industrial Conference Board *Business Record* for Nov., 1944.

[9] Cf. The *Survey of Current Business*, May, 1945, pp. 6–12.

[10] Cf. Priorities Regulation No. 28.

time, with consequent high costs. In this way, transition and delays in transition may dissipate much of the accumulated financial strength of the smaller manufacturers.

Many of the new manufacturing firms being formed have a shaky foundation in the sense that they are not based on a longer-term consideration of opportunities but are attracted by the chance to exploit a temporary market gap. And when the struggle for sales volume begins in a year or two, it seems likely that such firms will be much more effective in taking business away from each other than from the entrenched, large, established firms. To a lesser degree, this observation applies to all new business formed at this time; the opportunity for good earnings and improved financial position is here but the times are not conducive to the development of, nor a good proving ground for, buying, processing, and selling skill.

In passing, it should be noted that the type of buying and selling problems emphasized here have not occupied a significant part in the studies nor proposals of the proponents of small business. Instead, they have been concerned with the financing of small business, with assistance to management on its technological problems, and with the impact of taxation. Where attention has been directed to the relation of the small business to the markets in which it buys and sells, the objective has been to provide market information about market conditions or to protect it against overt discrimination and collusion—the type of problem for which the Federal Trade Commission and Robinson-Patman Acts were designed. Little awareness has been shown of, and no study has been devoted to, the problems of small business in buying and selling in markets characterized by monopolistic competition, but in which illegal discrimination or collusion cannot be shown.

7. Several miscellaneous wartime market developments can be disposed of in a few sentences. The area of competition has been broadened, both geographically and in the sense of intercommodity contest for the buyer's dollar. The search for raw and semiprocessed supplies wiped out pools of imperfect competition, and led retailers to new sources of supply of finished goods. Airplane transportation became of age. National distributors are more concerned about new areas, such as the Pacific Coast, and in some cases West Coast price differentials are being wiped out. Firms with prewar local or regional markets have plans to enlarge their market areas. Hundreds of firms look to export sales for the first time.

Wartime material substitutions, plus phenomenal scientific advances, have jarred the prewar safe, competitive position of some materials. By this means some monopolistic and ologopolistic positions are weakened. Although in a number of instances the same giants move into the new fields.

Of a similar character to interproduct substitution is the fact that high income consumers who have a relatively large free income above necessities are in a position to spend that income for any one of a large number of goods. At the same time, however, the struggle to persuade the consumer to buy is strenuous and results in a relatively high selling cost. Since these goods tend to be those of which the consumer is not a good judge of values, sales techniques developed by larger firms tend to be more important than price in obtaining volume.

In summary, the low business birthrate and high business withdrawal rate of the war, traceable chiefly to war conditions and not to controls, is now being reversed by a high rate of new business establishment. These new firms, and even the now fairly well-financed, small- and medium-sized established firms who did not enjoy a preferred market position before the war are up against large business and established brands fortified by the favorable consequences of the war. Mergers and wartime plant expansions have changed the size-class of many firms—nearly all on the larger side. Although the contrary influences bearing on market structures leave room for differences of opinion as to the net effect of the varied and sometimes offsetting developments of the war period, the balance seems quite clearly to be toward a more widespread presence and a higher degree of oligopoly and monopolistic competition. The war seems to have taken us several steps further in that direction and to leave less doubt than ever about the possibility of reversing that course except by a government program of dimensions and characteristics rarely visualized and of questionable desirability.

II. *Labor Markets*

1. A summary of what happened during the war in the labor market and in labor-management relations will provide the background from which to draw changes in market structures.

The total membership of unions grew from 10.5 million in 1941 to between 13 and 14 million at V-J Day. More importantly, the proportion of workers under union contracts has grown sharply, aided by the exclusive bargaining provisions of the National Labor Relations Act. By January, 1945, about 65 per cent of all production wage earners in manufacturing but only 33 per cent of nonmanufacturing employees were covered by union contracts. Within manufacturing, a substantial list of industries—tending to be those making durable goods or in which large firms were dominant—had the bulk of their wage earners under contracts.[11]

Under the pressure of the manpower shortage and in some cases as results of War Labor Board rulings, labor was able to get into its con-

[11] These figures and those that follow on use of maintenance of membership, closed shop, union shop, and check-off are from the *Monthly Labor Review*, Vol. 60, No. 4, pp. 816–822.

tracts a number of procedures which strengthen its position. By January, 1945, 27 per cent of workers under union contract were covered by maintenance-of-membership clauses, 28 per cent were under closed-shop provisions to which should be added 18 per cent under the union-shop arrangement, and over 40 per cent of workers employed under union agreements were under the check-off system. By early 1943 about 60 per cent of all workers under union agreement were covered by paid vacation clauses as compared to 25 per cent of such persons in 1940.[12]

The manpower shortage, plus the growing strength of unions in low-wage areas and the standards of the War Labor Board for approving wage increases—all contributed to bring greater wage uniformity. As a generalization wages rose more in per cent in small plants than in large (most of the latter were already unionized by 1941), more in low-wage than in high-wage industries, and more in low-wage than in high-wage areas.

The wider use of collective bargaining, together with the policies and procedures of the War Labor Board, contributed to a rapid establishment of job classifications with rates or ranges of rates for specified jobs.[13]

A number of other wartime developments can be covered in a sentence each. One is the general acceptance by management of collective bargaining, at least to the extent that strikebreakers will not be used. Another is management's experience with labor turnover, and its costs, as well as the costs of a disgruntled labor force. Third, wartime in-plant training, pre-employment training, and training programs in the armed services have built up a larger pool of labor with at least semiskilled status and also have improved training techniques and obtained approval for such techniques. Finally, the public unemployment service became of age during the war and has now a wider acceptance by both labor and management as an appropriate job or worker-finding medium.

2. What are the implications of these wartime developments with

[12] *Monthly Labor Review*, Vol. 60, No. 2, p. 299.

[13] The War Labor Board procedures encouraged the establishment of job classifications by making such classifications prerequisites to wage increases under two types of situations: (1) inequities, both intraplant and interplant, could be judged only by reference to rates and ranges of rates for comparable, defined jobs. The correcting of such inequities became one of the important sources of wage increases which could occur within stabilization limits, as both employers and employees sought to raise the workers' take-home pay without running counter to the wage stabilization rates; (2) in addition, there was a positive incentive to set up ranges of rates for jobs because any plant which had such rate ranges, if of the type approved by the WLB, could make merit increases within those ranges according to certain rules but without specific WLB approval. Since such merit increases enabled an employer who was battling to give his employees some wage increases within stabilization limits, there was an immediate motive to establish such a wage structure. As some evidence of the widespread adoption of job classifications, the OPA has found in its reconversion pricing, in which increases in basic wage rates since October, 1941, are used, that most firms now have job classifications with rates or ranges of rates for these jobs, although only the large unionized plants had such wage and job systems in 1941.

respect to the structure of the labor market and to employer-employee bargaining? It is not as easy to draw definite conclusions here as in the commodity area, but certain points seem to be fairly clear.

The widespread practice of rates for specified jobs will facilitate the determination of wage rates by collective bargaining. Negotiations can then be about a definite schedule of rates for a set of jobs. Furthermore, the wages of each employee will be determined not by his employer, but by the rate or range of rates set for all men on the same job, whether members of the union or not. Even in-grade promotions and the classification into which an individual falls may be the subject of administrative rules and procedures agreed upon in collective bargaining. In this way the individual can influence his own wage rate only by acquiring skills which enable him to move to another job class or to obtain a merit increase in the same job.

The existence of job classifications contributes to a higher degree of perfection in the working of both competitive and noncompetitive forces in the labor market. Although no one can claim that such classifications can be applied with the precision of the chemical test for the grade of vegetable oil, they do approximate those commodity standards which rely on judgment. As a result, differences among plants, industries, or areas in wages for the same job are more easily noted and corrective measures initiated, whether of the sorts assumed in competitive theory or those of a highly-organized market. This factor, considered alone, should tend toward a higher degree of uniformity of wages for the same work—whether unions are powerful or not. Over a period of time, however, job classifications may become solidified and impede necessary shifts in types of jobs and in rates.

The wartime progress of training techniques, the building up of a greater body of trained workers, the wartime movements of the armed forces personnel and migration of civilians, and the work of the employment service, should all contribute to geographical and to interindustry and interskill movement of labor.

There is reason to believe that prewar wage rate differences among plants, industries, and areas will not be re-established. Workers from low-wage employments have tasted higher wages, which will make them receptive to union action—and unions have a strong incentive to reduce or wipe out such differences as existed before the war.

In summary, it seems clear that the war brought to near fruition, and in a fairly dramatic fashion, those changes in the structure of the labor market which had been started, or revitalized, during the preceding decade. Organized labor is in a strong strategic position. It has an unprecedented membership, the hold on whom may be solidified during several years of postwar prosperity. Most key manufacturing industries

have union contracts. Labor and management have further developed tools of bargaining. Most management accepts organized labor, although in many small- and medium-sized firms businessmen do so with forebodings for they seem to attribute almost complete monopoly powers to labor.

Two reservations should be made. First, labor does not seem to have solved some of its own internal difficulties, such as jurisdictional disputes, rival national organizations, and "wildcat strikes." Second, the strong financial position of management compared to that of labor, abetted by a knowledge that the war-deferred demand will be there, even after an extended shutdown, may be used to resist extreme wage demands, or the inclusion in wage agreements of further clauses which strengthen the unions' position. It seems doubtful whether management will use its strength to fight organized labor as an institution, except in isolated instances, but may attempt and succeed in some cases in eliminating contract provisions such as the maintenance of membership or the check-off.

III. *Some Implications For Commodity Markets of the Changes in the Labor Markets, and Vice Versa*

1. The maturing characteristics of the labor market, noted above, motivated in part as they are by developments which have already occurred in the commodity markets, in turn have a causal relationship to further changes in commodity market structures. Professor Dunlop has suggested a number of these points[14] but he did not develop four that bear on the discussion here.

Both logic and observation suggest that the strong position of organized labor is but one more influence tending to increase the size of the business unit in those areas and trades successfully unionized. Along with the management specialization required to carry out product research, to develop merchandising techniques, and to handle relations with government at all levels, the effective dealing with organized labor requires time and skills which the jack of all managerial skills, the manager of a small business, does not possess. From the union's viewpoint small plants are more difficult to organize and with few exceptions organizing activities have been more intense and successful in industries with large plants. There is little evidence that organized labor is deeply concerned about small business. Instead, organized labor's leaders are concentrating on the task of becoming larger and stronger than its management counterpart. Finally, as we shall see in the following points, the wage policy of organized labor, in much of its ultimate logic, fits more closely the costs, organization, and price policies of large, mechanized

[14] John T. Dunlop, *Wage Determination Under Trade Unions* (New York, 1944), Ch. X.

plants, and of employers who enjoy the benefits of monopolistic competition.

To the extent that organized labor brings about interplant or geographical uniformity in wage rates having similar effects on wage costs, commodity market structures will be altered as management adapts itself to the situation. When a reduction of wage differentials which have governed competitive positions does occur, the geographical migration of labor and industry will be discouraged and, therefore, the market position of established firms will be preserved. Within the same area a tendency toward wage uniformity weakens the firms whose competitive position rests on lower wage rates. The effect on market structures, therefore, of a tendency toward wider wage uniformity depends on the extent to which the loss of a wage advantage will force a business to change its use of productive agents and its internal organization and cost structure, so that it is persuaded to change its price policies.

The level to which organized labor succeeds in pushing wage rates, compared to the ability to pay wages of the various firms which compete in selling, will affect commodity market structures. To the extent that wage rates are pushed toward what can be paid by those firms whose earnings are traceable to the productive efficiency arising from size or to product differentiation, firms who do well or even survive will be those which have or can acquire those attributes.

To the extent that wages are unresponsive to a decline in demand for an industry's product—and certainly organized labor's wage policies reduce such downward responsiveness[15]—management is persuaded to adopt price policies which minimize the effects on it of declines in the demand for its product. Otherwise, management is able to shift some at least of the burden of a decline of demand to its labor by cutting wages. When this opportunity is lost the individual firm will find that the effects of a decline in demand for its products can be minimized under a significant degree of oligopoly or monopolistic competition. Of course, the motive to do this is present in the absence of rigid wages, but the urge is strengthened by the inability to cut costs.

2. Shifting back to the structure of labor markets, it is clear that the growth of the size of firms and the development of product differentiation are powerful incentives behind the unionization of labor and the aggressive pushing for higher wages and other phases of the worker's welfare.

The monopsonistic position acquired by large business in the labor market provides an emotional and logical economic motive for organized action by labor.

[15] Cf. Alfred C. Neal, *Industrial Concentration and Price Flexibility* (Washington, 1942), Ch. VII.

To the extent that an oligopolist or the successful seller of a differentiated product gains by his market position the workers have a fully understandable motive to share in the proceeds which the structure of the market denies to the consumers of the products.

Step by step the simultaneous and, to a degree, casually interrelated modifications in commodity and labor market structures are proceeding with additional stimulus from numerous other technological and social forces. This course of events is not new to the economist nor has he omitted its analysis. Now that the course appears irrevocable, it is appropriate that the economist question whether he has treated the changed system merely by a patchwork adjustment of an older analysis. Likewise, has he been inclined both to explain the functioning and to evaluate the consequences of the altered markets as departures from or in contrast to an older order? Has he been influenced by a nostalgia for an earlier order, or has he heralded the new without a full appreciation of its functioning or ultimate character or consequences?

The war end, although it does not show a sharp break in the character of markets, does by clarifying the nature and definiteness of trends in market structures bring both the need and the opportunity for a new look at the economics of the market. In this re-search, the economist may, if he will, buttress his findings by the richest body of institutional and factual information ever available. The time is short, for if the re-examination of market structures and their functioning brings new conclusions, the public must be enlightened and public policy clarified or be put on an altered course before we have passed through the early postwar years, for during that period the patterns of thought and action are relatively fluid.

THE CHANGED ENVIRONMENT OF MONETARY-BANKING POLICY

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The second World War and the preceding decade of depression, deficit financing, and expansion of the role of government in economic affairs have profoundly altered the environment of central banking in the United States. Among the major changes have been: first, far-reaching shifts in the climate of opinion; second, the rise of new governmental tools for deliberate exertion of monetary influence, not yet co-ordinated with Federal Reserve machinery; third, the emergence of a public debt so big that even moderate increases in interest rates (one of the principal tools of traditional central banking management) would produce very sizable increases in the government's interest costs; fourth, a vast increase in the public's holdings of currency, bank deposits, and government securities without a commensurate increase in output or prices; and, fifth, the transformation of our commercial banking system from one in which the public's cash and the earnings of banks were mainly based upon loans to private business to one in which they are mainly based upon bank holdings of public debt securities.

To appreciate the significance of these changes let us cast a glance backward for a moment to the situation that preceded them.

I

When the Federal Reserve System was created by Congress in 1913, the international gold standard was firmly established in most of the principal trading nations of the world. The new banking system was not intended to supplant the gold standard in the United States. It was designed primarily to prevent further recurrence of the repeated monetary panics and seasonal credit stringencies to which this country had been subject by reason of our lack of provision for seasonal and emergency elasticity in our currency and bank reserves. Although Congress did not lay down a specific rule to this effect, it was generally contemplated that under the Reserve System, as before, movements of gold into and out of the country would be the chief source of changes in bank reserves and in credit conditions. The scope of the Reserve Board and the Reserve banks for discretion in controlling the amount and cost of credit was regarded at first as limited to the smoothing over of temporary maladjustments.

During the twenties the concept developed that instead of being confined to periods of seasonal and emergency strain in the money markets, central banking action should be taken more or less continuously to moderate short-run cyclical fluctuations in business. This trend of

thought and policy was encouraged by the greatly diminished reliability of gold movements as useful guides to monetary policy. Early in the decade most European countries operated on paper currencies and did not permit the free movement of gold. The movements that did occur therefore tended to be erratic and unrelated to current trade transactions. Later in the decade large international capital transactions resulted in similar distortions. It became necessary, therefore, to develop substitute criteria for gold movements as guides to credit policy, and in this process the moderation of short-run or cyclical fluctuations in business developed into a major objective.

Crucial to the power of gold movements and of central banking policy both before and after the first World War, was the fact that the supply of money and credit, with brief interruptions, was chronically tight. There was nearly always a significant degree of tension in the money markets. The great bulk of this country's bank deposits arose from direct interest-bearing loans made by banks to business enterprises; and the banks were usually "loaned up." Expansion in the aggregate expenditures of the country commonly required additional business borrowing from the banks, and the latter's ability to increase their lending depended primarily upon additions to our gold reserves, or, after 1914 upon the readiness of the Reserve banks to expand their credit. Under these conditions the Reserve authorities could exercise a very direct and sensitive control over alterations in the amount and cost of bank credit available for business borrowers; and, through this control, they could exert a substantial influence upon the aggregate volume of the country's spending. This influence seemed to be so direct during the years of generally active and expanding business in the twenties that exaggerated ideas of its potency came to be widely entertained.

It remained for the Great Depression to bring home to everyone that central banking policy by itself, however well designed and skillfully managed, is sometimes helpless and is always limited. Its power is primarily one-sided. It can shrink the rate of spending by restricting the amount and raising the cost of credit. It can stimulate to some extent by relaxing restrictions only when a significant degree of tension already exists in the money markets. But it cannot force either the member banks or their customers to use additional credit when the general economic climate is forbidding. It cannot by itself do such things as recapture lost foreign markets, or undo the results of technological change, or rekindle the flame of business enthusiasm when this has temporarily burnt low. Droughts, earthquakes, foreign wars, and internal political changes, among many other things, may for considerable periods dwarf the influence of central banking policy upon the course of prices, employment, and the national income.

II

1. *The changed climate of opinion.* Since 1929 there has been a striking shift of concern and emphasis from the problems of short-run cyclical stability in business and credit to the long-run difficulties of maintaining a high level of employment and output. Where depressions were once regarded as brief interludes in the steady march of economic progress, to be attacked and eliminated by appropriate credit policies or to be welcomed in mild doses for their cathartic action upon the inefficiencies and wastes that develop during booms, they have now come to be widely regarded as an inveterate tendency of our economy—a ceaseless threat that needs to be combated by all manner of direct and rearguard actions. Frequent central banking adjustments in both directions commended themselves highly when credit policy was viewed as the helmsman steering the economy through a very narrow channel between inflation and unemployment. But now there is fear that the effects of restrictive short-run credit policies may long outlast the occasioning circumstances and reinforce the secular tendency toward contraction. A continuous promotive policy is therefore desired by many. As they see it, the whole system of private enterprise is now on trial to demonstrate its capacity to provide a tolerably high level of employment. In their eyes the danger to it does not stem from its occasional excesses of speculation and boom. Its real danger is that of prolonged depressions.

This shift in emphasis is traceable mainly to the empirical experience of the thirties, but a scientific or intellectual rationale for it has been provided by the doctrines of J. M. Keynes and Alvin H. Hansen, which hold that the possibilities of full employment and optimum output are chronically obstructed in our society by deficient investment and consumption—by would-be savings that fail to get invested.

In the new climate of opinion, the government is charged with a far greater measure of direct responsibility for the general level of economic activity than was formerly the case. The idea that it is the duty of government to underwrite a stable high level of employment, using deficit spending as a major instrument if necessary, underlies the proposed Full Employment Act of 1945 and similar bills.

There has been a marked diminution in the influence of traditional and mechanical criteria upon the attitude of the public toward monetary management. The smooth handling of technical operations and problems by the Reserve System and the downfall of the international gold standard have contributed much to this result. In 1919 the expansion of half a billion dollars in Federal Reserve note circulation aroused so much comment and concern that a resolution was introduced in Congress calling for inquiry into the question whether the currency

ought not to be gradually but arbitrarily reduced,[1] and the Secretary of the Treasury and officials of the Reserve System found it desirable to give reassurances to Congress and the public.[2] Since the end of 1941 money in circulation has risen by an average of about 4.5 billion dollars a year without arousing acute concern. The chains of traditional dogmas have loosened so much that little public attention was given to the amendment passed by Congress in June, 1945, reducing the reserve requirements of the Federal Reserve banks against notes and deposits to 25 per cent; and no charge of heresy was leveled against Chairman Eccles of the Board of Governors and Vice-President Williams of the Federal Reserve Bank of New York when they testified before a Congressional committee that reserve requirements against Federal Reserve notes could well be eliminated altogether.

This diminution in the coercion of conventional dogmas correspondingly increases both the discretion and responsibility of the monetary authorities in the formulation of policy. Changes in interest rates and in the availability of credit are no longer regarded by the public as inexorable developments—the products of uncontrollable forces such as gold movements and reserve ratios. They are now recognized as the products of discretionary policy within very substantial limits.

The repugnance to direct government controls has diminished. Monetary and even fiscal controls operate mainly on an over-all, impersonal, nonselective basis and are for this reason more congenial to our traditional relations between government and industry than specialized administrative regulations. Nevertheless the American public has shown itself increasingly willing, not only during the war, to adopt direct or nonpecuniary controls in various fields. The rapid growth of administrative commissions and administrative law in recent years reflects this tendency. The Reserve System's own direct or administrative powers are by no means inconsequential. The System has long exercised the power to discriminate in favor of or against various types of paper offered for rediscount, and the discretion to refuse to lend to banks that persist in following disapproved policies. The System was granted control of margin requirements in the securities and exchange legislation of 1934, and wartime control of installment credit in 1941. The Treasury Department during the war has made the holding of most of its new, longer-term securities ineligible for commercial banks for a stipulated period—a selective administrative ruling of considerable significance to the banking system. The War Production Board regulated the size of inventories that business concerns might accumulate—a kind of control

[1] *Annual Report of the Secretary of the Treasury for 1919*, p. 17.
[2] *Annual Report of the Secretary of the Treasury for 1919*, pp. 17–18; letter of W. P. G. Harding to Chairman G. P. McLean of the Senate Committee on Banking and Currency, *Federal Reserve Bulletin* for Oct., 1919.

that is directly related to central banking purposes, and one that may have peacetime possibilities in inflationary emergencies.

The outstanding significance of selective direct controls is that they are capable within considerable limits of providing a workable substitute for price increases in restricting the effective demand for goods and services. In view of the powerful political forces that are operating to limit the effective power of the Reserve authorities to raise interest rates, a serious and thoroughgoing exploration of the possibilities of extending the use of selective direct credit controls for regulatory purposes would seem to be indicated.

2. *Unco-ordinated new monetary tools.* Related to the changes in the climate of opinion has been the emergence since 1929 of new monetary tools, unco-ordinated with the Federal Reserve System. The depression-born conception of the monetary possibilities of fiscal policy, to which increasing substance has been given by the growth in the federal budget, is one of these. The legacy of the war in vastly increased budget requirements for servicing the public debt, for veterans' rehabilitation and pensions, and for the greatly expanded needs of our military, air, and naval establishments will be superimposed upon the additions to the government's regular activities that occurred during the thirties. In consequence, federal taxes and expenditures will now bulk large enough to enable changes in them to exert pronounced monetary effects. The proposed Full Employment Act of 1945, previously cited, is expressly intended to use this power.

The new importance of fiscal policy for the Federal Reserve System has been recognized implicitly in recent years by the great interest in fiscal matters displayed by the Chairman of the Board of Governors, who has repeatedly testified on pending fiscal legislation before Congressional committees. Chairman Eccles has not hesitated to advocate specific tax measures for monetary or quasi-monetary purposes. A recent example was his proposal to impose a confiscatory rate of tax on capital gains attributable to wartime speculation, in order to dampen down what he considered a dangerous development of speculation in land values and in the stock market. (It is significant that his other proposals to the same end—the establishment of maximum loan values for real estate and the raising of margin requirements on securities—likewise avoided the use of the more traditional, over-all restriction of credit.)

But other than the voluntary and self-initiated appearance of Reserve System officials before legislative committees and informal conferences with representatives of the Treasury and the Budget Bureau, there is at present no established procedure whereby the experience and thinking of the Reserve System can be brought to bear upon fiscal

policy. Even such a measure as the proposed Full Employment Act of 1945, which would formally establish a national economic policy of full employment and would set up some machinery for achieving it, makes no provision for co-ordinating fiscal and monetary policy.

A similar absence of co-ordination exists with respect to a variety of new governmental institutions that have been created in recent years to promote particular uses of credit: the Federal Housing Administration, the Home Owners' Loan Corporation, a number of additions to the Federal Farm Loan System, the Export-Import Bank, the Reconstruction Finance Corporation, and, now, the International Monetary Fund and International Bank. These institutions operate mainly in one direction—promotion. In this respect they differ fundamentally from our central banking authorities, whose main powers are those of restriction.[3] The promotive credit agencies are likely to be far more concerned with the long-run development of their special fields of interest than with shorter-run fluctuations in the general economic situation. Hence, some measure of conflict between their policies and those of the Reserve System is likely to occur from time to time.

Finally, the vastly increased magnitude of the Treasury Department's public debt operations give its inherent monetary powers new practical importance.

It is clear that the environment in which Federal Reserve policy must now be formulated and applied is one in which its traditional quantitative controls may conflict with and be weakened or completely negatived by the unco-ordinated policies of other governmental bodies, or, if effective co-ordinating procedures can be established, be reinforced, supplemented, and perhaps in part replaced by them.

3. *The new significance of the level of interest rates.* The power to bring about a general contraction or limitation of bank credit, with an accompanying rise in interest rates, has been the principal power of central banks. But how real is this power under present conditions? Even before the war the deliberate promotion and maintenance of low interest rates had become an avowed objective of many governments, including those of the United States, Great Britain, Canada, and Australia. This policy first received strong support as an antidepression expedient; then as a long-run measure to combat secular unemployment. To this support was joined that of various special interest groups, such as farmers, home owners, "small business," and those who favored extensive government borrowing for various construction projects. Now the direct and extremely powerful pressure of the desire to minimize the

[3] The Federal Reserve banks, however, it may be noted, were also given a new promotive power during the depression—the power to make direct loans to qualified business firms and individuals upon a showing that adequate credit was not available to them from other sources.

fiscal burden of the public debt has been added to these other influences opposing a restrictive credit policy.

With an interest-bearing public debt already approximating 275 billion dollars, the interest charges alone, at present rates, will exceed the total budget of the federal government in any peacetime year with the exception of the deficit-financing period of the thirties.

The tax increases that would be needed to meet a rise in interest costs, superimposed upon the heavy taxes that will be required for other purposes, would necessitate harsher burdens upon the lower income groups or further damage to business incentives. An increase of one-half of one per cent in the average rate of interest would add a greater sum to the federal budgetary requirements than the total receipts from corporation income taxes in any year between 1925 and 1940, and an increase of 1 per cent, more than the total receipts from the individual income tax in any year in this period. The same tax increases that might be tolerated if adopted expressly for temporary periods to combat inflation, with the proceeds available to reduce the public debt, might be politically intolerable if levied to meet advances in the interest cost of a deadweight debt.

In view of these considerations and of the changed climate of opinion that I have discussed previously, the actual power of the Reserve authorities to enforce a substantial over-all contraction of bank credit is dubious.

4. *The vast increase in the public's holdings of cash and government securities and the consequent impairment of the Reserve System's ability to influence the rate of private spending.* The deposits of our commercial banks on June 30, 1945, were two and one-half times those of 1929, four times those of 1933, and double those of 1940. The amount of money in circulation was more than five times that of 1929 and approximately three times that of 1940. The total of currency, bank deposits, and government securities held by the general public at the end of 1945 (excluding the holdings of the federal government, banks, and insurance companies) totaled more than three times the amount held five years earlier. The country's supply of cash is so large relative to prices and output that great variations in private spending, ranging from a rate insufficient to provide a high level of employment to a rate easily sufficient to produce a marked inflation of prices, are now possible without any significant alteration in the quantity of money and credit.

Control by the banking authorities of the rate of spending is also diminished by another factor: the public's cash holdings now consist largely of *owned* funds, net of any indebtedness to the banks, whereas it was formerly derived mainly from direct business borrowing from

banks. In 1929 the direct loans of business enterprises from commercial banks were equal to 65 per cent of the total of currency and bank deposits outstanding; at the end of 1944, they constituted only 14 per cent. When the cash holdings of individuals and business enterprises are largely derived from direct bank loans, the rate of business spending is likely to be highly sensitive to alterations in the availability and cost of credit, and, therefore, to the traditional instruments of Federal Reserve policy. This follows from the fact that when the demands of borrowers are rejected or only partially allowed, their ability and readiness to spend is directly reduced. But when the public's cash holdings are derived mainly from other sources, the rate of private spending is partly insulated against over-all credit restriction.

There are many persons who have an easy answer to this problem: force the commercial banks to sell much of their holdings of governments to the public. The amount of bank deposits and currency in existence would be reduced dollar for dollar by such sales. To bring this about, the Reserve authorities need only tighten the money markets by raising member bank reserve requirements and further absorbing member bank reserves through open-market sales of their own holdings of government securities. At the higher interest rates that would result from these actions, the public (it is assumed) would readily purchase large amounts of Treasury obligations now held by the Reserve and commercial banks.

This prescription begs the question of the elasticity of response on the part of the nonbank public to a moderate rise in interest rates. It is one thing if a rise of one-half of one per cent would produce substantial results; it is quite another if a rise to 5 or 6 or 7 per cent were necessary. The scanty available historical evidence that I have examined does not justify an expectation of great responsiveness. Nor do analytical considerations. Institutional investors tend to invest their funds at the going rates about as fast as the funds come in, and the same is true of most wealthy individual investors. Other savers, looking forward to the early use of liquid balances for new houses, automobiles, and the like, and business corporations that hope to use their big bank balances for plant or inventory additions, are unlikely to rush into long-term governments because of a moderate rise in yields, though they might move into short-term obligations having nearly all the earmarks of cash. The great expansion in the cash holdings of the public during the war took place in the face of the nearly continuous availability of interest-yielding Treasury securities guaranteed against price depreciation and possessing virtually instant redeemability. Less than one-half of the Treasury securities sold during the war was purchased by individuals, business corporations, insurance companies, and state and local governments.

The rest, exclusive of the amounts sold to government agencies and trust funds, was taken by the banking system. It would be surprising if the same people who preferred cash to governments during wartime could be induced now by a moderate rise in interest rates to reverse their actions.

Further, such reduction in the nominal quantity of money outstanding as could be achieved in this manner would not greatly affect the inflation potential. It would not be likely to cause a marked reduction in the current rate of spending; and it is spending, not idle cash, that influences prices. The idle or less active balances would be the most apt to be converted into government securities. Consumers would not decide to go without washing machines or automobiles because the rate of interest obtainable on government bonds rose from $2\frac{1}{2}$ to $3\frac{1}{2}$ per cent. Nor would business corporations be induced by this development to forego replenishing their inventories or remodelling their plants. Few persons or business enterprises that converted part of their cash into governments would feel poorer or markedly less liquid for having done so. The net effect might be mainly that depositors would turn over their remaining balances more rapidly, with no significant curtailment in their rate of spending. For the plain fact is that governments are not much different from cash until they get into the hands of more or less professional holders of investment securities, such as insurance companies and well-to-do individuals.

The impact effects of a falling bond market, moreover, could well be dangerous. Even a moderate fall would be unsettling to banks and might set off disorderly selling. A sharp rise in bond yields, say to a level of 5 per cent, would be capable of being widely interpreted as reflecting upon the credit of the federal government, with the result that the fear of inflation, and hence the possibility, would be accentuated. On a 5 per cent yield basis our $2\frac{1}{2}$ per cent long-term Treasury's would be selling in the low and middle sixties, our $2\frac{1}{4}$'s in the low seventies, and even an eight-year 2 per cent would be selling nearly twenty points under par. The totals of our public debt, currency in circulation, and bank deposits are now so strikingly greater than ever before as to be capable of lending color to ill-founded rumors and interpretations conducive to a loss of confidence in the currency.

In addition, the political repercussions of a radical rise in interest rates could easily be destructive of our existing machinery for credit control. In view of the whole new framework of thought stressing the long-run desirability of low interest rates and of the consequences of a sharp rise in interest rates to the federal budget, to various public programs, and to various large groups of our population, both Congress and the Executive could be expected to combat it strenuously and very possibly to

interfere with the powers or personnel of the Reserve System in the process.

A developing inflation that did not arise out of new borrowing by business could be attacked more appropriately and effectively by other weapons than a general tightening of the money market. Among these would be the prompt balancing of the federal budget; the creation of budgetary surpluses and their use to retire Treasury securities held by the banks; the use of the present type of Federal Reserve control of installment credit, but on a permanent legislative basis; the slowing down of the operations of the government's various promotive credit agencies; etc.

5. *Transformation of our commercial banking system into one based mainly upon holdings of the public debt.* Since 1929 our commercial banking system has been transformed from one in which bank deposits and bank earnings were based mainly upon direct customer loans to private business to one in which they arise mainly from bank ownership of the public debt. At the end of 1929, the loans of our commercial banks totaled about three times their holdings of all kinds of securities; at the middle of 1945, their loans amounted to only about one-fifth of their securities, and the latter were mainly United States Government obligations, which constituted three-quarters of their total earning assets.

The new position of the public debt as the chief earning asset of the commercial banks raises a number of major problems for the Reserve System:

Its control of commercial bank lending has been seriously impaired. When a commercial bank has a large portfolio of marketable securities, it need not seek the aid of its Reserve bank to expand its direct loans after using up its excess reserves. It can sell securities in the open market. The kind of loans it makes as well as their aggregate amount is placed beyond the reach of the Reserve bank. The Reserve System can still restrain a net credit expansion by the member banks as a whole by limiting member bank reserves. But undesirable types of bank lending might continue to expand, the banks obtaining funds therefor through the sale of governments to other banks and to nonbank investors. Such sales would transfer the inactive balances of the purchasers to the sellers or borrowers who would put them to active use. In other words, bank lending could continue to finance an expansion in the rate of spending, and in undesirable directions, even though no net increase occurred in the nominal amount of Reserve or member bank credit outstanding.

The maintenance of an orderly bond market for government securities has assumed a new importance that conflicts with quantitative methods of controlling credit. Only if the general restrictive credit policy were suffi-

ciently pronounced to cause severe depreciation in the market value of government securities could it be relied upon to stop an undesired loan expansion. At sharply lower prices, many bankers would doubtless forbear to sell their governments because of the book losses they would realize, even though the proceeds could be loaned out to customers at high rates of interest. In short, an effective over-all curtailment of credit under present conditions would operate through and function like a specific attack upon the government bond market.

As of June 30, 1945, 38 billion dollars of the 82 billions of governments held by commercial banks consisted of bonds whose maturities were more than five years away. A $1\frac{1}{4}$ per cent five-year note would drop nearly six points below par if it went to a $2\frac{1}{2}$ per cent basis; an eight-year $1\frac{1}{2}$ per cent bond would drop more than 7 points under par. The 14–17 year $2\frac{1}{4}$ per cent bond issued in the Victory Loan would drop $6\frac{3}{4}$ points if it went to a $2\frac{3}{4}$ per cent basis; and a 22–27 year $2\frac{1}{2}$ per cent bond would drop about $9\frac{3}{4}$ points below par if it went to a 3 per cent basis. A decline of only 3 per cent in the aggregate market value of commercial bank holdings of governments would wipe out one-third of their total capital funds.

A new question arises respecting the legitimate level of bank earnings when the latter are mainly derived from government securities. The traditional concept that a commercial bank earns interest for the service of substituting its superior and better known credit for the inferior and lesser known credit of the borrower is strikingly inapplicable to the present situation in which the commercial banks, with total capital funds of 8 billion dollars, are extending credit to the United States Government in the amount of 85 billions. Other grounds for interest payments by the government to the banks may be readily found in the monetary machinery provided by the banks. But how much shall the banks be paid for performing these services? Mainly as the result of their increased holdings of governments, the net profits of member banks in 1944 were two-thirds larger than in 1941 and larger than in any previous year. They rose by another 25 per cent in the first half of 1945 as compared with the like period of 1944. The wartime boom in bank earnings differs from that of other industries in that the supporting conditions will not disappear with the end of the war. The existence during the war of high excess profits taxes and of high taxes on ordinary corporation income has thus far both obscured and mitigated the questions of equity and public relations created by the amount and governmental source of bank earnings. These questions will be aggravated from now on with the excess profits tax repealed and other corporation income taxes reduced.

Will member banks be disposed to assume the normal risks of commercial

lending in suitable volume under present conditions? With the great increase in their earnings from government securities, many commercial banks no longer possess the incentive they once had to seek commercial loans. They can now make a good living without taking the risks of direct loans to business. Since they are profit-seeking enterprises, this fact alone would not necessarily act as a strong deterrent. But it is joined and made doubly effective by another influence: the unprecedentedly thin and still shrinking capital ratios of the commercial banks. Between the middle of 1934 and the middle of 1945 the capital funds of the insured commercial banks increased by one-third but their deposit liabilities multiplied by $3\frac{1}{2}$. The ratio of their capital funds to deposits had shrunk to 6 per cent on June 30, 1945.

These circumstances impair the ability of the Reserve System to stimulate direct lending by banks. An easing of credit conditions would doubtless induce many banks to add further to their holdings of governments rather than to assume the risks that go with any but the highest qualities of business loans.

The continuance of the commercial banks as private institutions does not rest upon their ability to buy and own governments and to create deposits in the process. The government or the Federal Reserve banks alone could perform this function. The commercial banks doubtless contribute invaluable services to their communities as money changers, repositories, and bookkeepers, among other things. But their most vital function as private enterprises is the lending function. If by reason of excessive earnings from holdings of government securities they are led to respond inadequately to the legitimate needs of their communities in this respect, they give up the most vital reason for their continued existence as private institutions.

III

In my opinion the least violent solution of the major banking problems arising out of the public debt would be a variant of a proposal I made at a meeting of the American Statistical Association five years ago: the substitution of a single uniform Treasury obligation, which would constitute a part of the required reserves of the commercial banks, for the bulk of the heterogeneous government securities now held by them. Just as it formerly required that national bank note currency be secured by United States bonds bearing the circulation privilege, Congress could require all banks with deposits in excess of perhaps 1 million dollars to maintain, in addition to other reserves required by federal or state regulation, reserves in the form of special Reserve Certificates or Reserve Bonds equal to stated proportions of their deposit liabilities. The Reserve Certificates would bear interest at perhaps 1 per cent and

would be payable upon the demand of any bank. Initially any bank could obtain the amount it needed in exchange for outstanding government obligations. Afterward, the Certificates could be purchased from the Treasury at any time in the amounts needed to meet the Certificate Reserve requirements, and banks whose requirements had fallen would be required to turn in their excess certificates for redemption at stated times, such as the end of each week or month.

Under such an arrangement, the present reserve requirements of the Board of Governors would continue to govern credit expansion.[4] The precise percentages that Reserve Certificates should constitute of deposits from time to time might be left to the discretion of the Reserve System within limits established by Congress, and the percentages could vary for different classes of banks and for demand as against time deposits, as is true of ordinary reserve requirements. By making the Treasury rather than the Reserve banks or the FDIC the depository agency for the new reserves, the jurisdictional limitations of the banking agencies would be avoided.

The principal advantages of transforming the bulk of the bank-held portion of the public debt in this manner may be summarized as follows:

1. The Treasury would permanently fund at a low interest rate about one-half of all the outstanding marketable government obligations in private hands. The result would be to remove this large fraction of the total from the category of ordinary public debt obligations and to eliminate all the refunding operations otherwise necessary for it. Although any individual bank could redeem the Reserve Certificates on demand, the Treasury would never experience a net loss of cash to the banks as

[4] Shifts of deposits between banks would result in no change in the amount of Reserve Certificates outstanding. Bank A, which gained $100 of deposits, would meet the Certificate Reserve requirement by buying $50 of Reserve Certificates from the Treasury at the next settlement date (and would meet its ordinary reserve requirement by depositing $20 with its Federal Reserve bank). Bank B, which had lost the $100 of deposits, would be required to turn in $50 of Reserve Certificates for redemption on the same settlement date (and would also have its ordinary reserve requirement reduced by $20).

An increase in the ordinary reserves of the member banks as a whole, which could be brought about by an increase in Federal Reserve credit, gold imports, or a return of currency from circulation, among other means, would be capable of producing the same multiple expansion of member bank credit as is the case today, but one-half of the expansion would have to take the form of increased holdings of Reserve Certificates (assuming a 50 per cent Certificate Reserve requirement). Thus, if a customer of Bank A sold $100 of marketable securities to a Reserve bank, and deposited the proceeds with Bank A, the latter's reserves and deposits would each be increased by $100. Bank A would be required to keep about $20 of its new funds as ordinary lawful reserves and to purchase $50 of additional Reserve Certificates from the Treasury, leaving it $30 free for loans and other investments. The $30 it so uses plus the $50 paid to the Treasury, which the latter would use to retire an equal amount of its other obligations, would find their way into the reserves of other banks to serve in similar manner as the basis for deposit expansion, until a total of approximately $500 of new member bank deposits had been erected on the basis of the $100 of reserves created by the Reserve bank purchase of securities (the 5 to 1 ratio being the result of the 20% average ordinary reserve requirement).

a whole unless the banks themselves were experiencing a reduction in their deposits.

2. The Reserve banks would regain a considerable measure of control over direct bank lending because the individual commercial bank could no longer obtain funds for loan expansion through the liquidation of its governments except in the greatly reduced measure in which it would continue to own ordinary marketable Treasury obligations.

3. The threat of sporadic waves of large-scale selling of governments by the banks and the accompanying threat to the stability of interest rates and the supply of money would be greatly reduced. The ability and disposition of the commercial banks to cushion the bond market against waves of selling by other investors and to perform their traditional services in the distribution of Treasury securities would be renewed and reinforced, for the banks would possess only a small fraction of their present holdings of marketable governments. On the other hand, for the same reason, the impact of a restrictive credit policy by the Reserve System would not be as concentrated upon the government bond market as under present arrangements.

4. The problem of bank earnings would be solved in an equitable, safe, and reliable fashion. The suggested initial rate of 1 per cent compares with the rate of three-quarters of one per cent paid to commercial banks in Canada and Australia on special deposits made with the Treasury or central bank during the war, and with the rate of one-half of one per cent now paid by Great Britain on such deposits. If continuing additions of governments to bank portfolios created excessive earnings from the 1 per cent rate, an appropriate reduction could be made.

5. The commercial banks would be relieved of all worry over the future course of interest rates and bond prices so far as the bulk of their assets is concerned. With perhaps 50 to 65 per cent of their *earning* assets no longer subject to price risks, as well as perhaps 25 per cent more in the form of cash, the liquidity and safety of the individual banks and the system as a whole would be enormously increased. The effect would be tantamount to a huge increase in banking capital. In consequence, the ability and disposition of banks to assume ordinary risks in lending would be enhanced. On the other hand, the large aggregate reserve requirements would promote a stability in the volume of deposits approaching that of a 100 per cent reserve system.

6. Increases or reductions in bank holdings of government securities could be better regulated with deliberate regard for their effects upon the country's volume of bank deposits and rate of spending, instead of being permitted to occur in response to other influences without regard to their monetary effects. The Certificate Reserve plan would also have definite advantages in making further additions to the public debt, if

they should occur, more manageable within substantially our present institutional arrangements. A permanent market at a low interest rate would be assured for that part of the increase in debt which was to be absorbed by the commercial banking system. The Reserve Certificate requirements against bank deposits would merely be raised as needed from time to time and the additional Reserve Certificates sold to the banks. If it were decided to finance additional deficits by the sale of securities directly to the Reserve banks instead of to the commercial banks, similar certificates could be issued, with ordinary reserve requirements being raised to offset the expansion that would result in member bank reserves.

The broad changes that have occurred in the environment of monetary-banking policy are not easily reversible. The old climate of opinion cannot be restored by fiat; the new monetary importance of the federal budget and of promotive credit agencies is at least as likely to grow as to decline; the enlarged federal debt, barring alterations in present monetary practices, will remain for generations. Consequently, in reviewing these changes, I have not strained to make old policies appear appropriate for new conditions. Instead I suggested that we accommodate our policies and procedures to the new environment as by a greater resort to selective and administrative controls of credit as against over-all quantitative controls, by better provision for co-ordinating credit and fiscal policies, and by transforming the bulk of the Treasury obligations now held by the banks into a security constituting a part of their required reserves.

DISCUSSION

Glenn E. McLaughlin: In considering the future geographical pattern of industry, we must be careful not to overemphasize the effects of war plants. New plants can be constructed and in the next few years a heavy investment in manufacturing plants is likely. This new investment will be distributed geographically according to the locational factors now operating for all peacetime industries, including those consumer goods and construction industries which expanded capacities little during the war. As a result, industrial shifts to the South and West are likely to be of future significance.

In his excellent paper Dr. Stewart, however, has been concerned mainly with the war plants. He has raised one issue which calls for further comment. He has pointed out that the lack of a government program for the disposal of war plants is hindering the effective utilization of facilities in the West and South. Aluminum and steel facilities in the West are mentioned as examples of plants which are handicapped by insufficient consideration on the part of the government and by the opposition of established producers. These factors are of some weight no doubt, but probably more important is the basic difficulty of disposing of plants with large capacities in areas with small or undeveloped markets. As a matter of fact, the Reconstruction Finance Corporation has received few serious inquiries for most of the large metal facilities in the South and West, despite considerable advertising and other publicity. As regulations stand, the first move must be made by potential private operators of these plants. Policy problems of course will rise in negotiating the final terms of sale or lease. No doubt some allowance will have to be made for what might be called the locational disadvantage of these plants. This should present no serious difficulty, however, because similar discounts have already been made for excess clearances, unneeded installations, and even for excess capacities. Government procedures may have delayed disposition somewhat, but as soon as all potential operators have been given an adequate opportunity to express their interest, the War Assets Corporation will undoubtedly make some disposition of these facilities in the newer industrial regions.

It may be helpful to look at the entire plant disposal program, which is now well underway. By the end of 1945, the RFC had sold 101 plants costing about 178 million dollars out of a total of 1700 new plants costing about 12.3 billions and about 2100 expansions and conversions costing about 3.4 billions. Of course some large plants may be held in standby and never declared surplus for sale or lease to commercial operators. Others, even though surplus, will have to be dismantled.

Although these sales so far are comparatively small in number, there are some significant regional differences. The great bulk of sales has been in the Middle Atlantic and Great Lakes states—81 of the 101 plants and 86 per cent of the plant investment. In other regions of the country the proportion of sales is far below the share in total war plant expenditures. Thus the two far western regions—Mountain and Pacific—account for 13 per

cent of total plant cost but only 1 per cent of sales. The contrast in the three southern regions was also outstanding—23 to 8 per cent.

In addition, commercial lease agreements had been reached for 47 plants by the end of the year. This group was also concentrated mainly in the industrial Northeast—about 80 per cent of the total. It does include, however, one large plant each in Texas, California, Missouri, and Kansas.

Aside from the new plant constructions, the RFC has reached interim leases for some 210 plants financed by its old subsidiary, the Defense Plant Corporation. These leases allow the wartime operator to continue production on a short-term basis in order to test the feasibility of converting to peacetime operations. Again there is a marked emphasis on the Middle Atlantic and Great Lakes states, although a fair number of interim leases have been made for plants in New England, the Southwest, and the Far West.

When the war production facilities were being located, it was evident that there would be important regional differences in the ability to use these plants after the war. It was clear that the industrial Northeast possessed a better chance of using its new facilities than either the South or the West and that New England was probably not in as good a position as the rest of the Northeast. As the above figures indicate, disposal of facilities to date reflects a very great advantage to the major manufacturing states. In our earlier estimates on convertibility or salability, probably insufficient weight was given to locational differences for the same type of facilities. Thus, it has been easier to dispose of a machine shop in established production centers than in the West or the South. Moreover, it was not anticipated that there would be such a shortage of manufacturing space for civilian production. The pressure to resume operations in the durable peacetime industries, particularly automobiles, has created a keen interest in available industrial properties in the Great Lakes-Middle Atlantic states. Although some of these properties have been poorly located and poorly constructed for peacetime use, they can be made available for civilian production much more rapidly than new buildings can be constructed.

The disadvantage of the newer industrial regions appears to be greater than previously estimated, mainly because of the lack of industrial interest in shipbuilding, aircraft, and explosives facilities. It had been assumed that at least a small fraction of these facilities could be adapted to peacetime use. Such an assumption still seems warranted in spite of the delay in finding peacetime operators. Disposal in these areas has been held up somewhat by the reservation of a number of plants for either temporary or permanent standby. In addition, certain federal and state agencies, especially in the South and West, have exercised their prior claims to some of these facilities for nonmanufacturing uses, such as for offices and for retraining and rehabilitation programs. Although the South and West have so far fared rather poorly in realizing a peacetime advantage from their new war facilities, the final result may be somewhat more favorable. In the first instance, there are a number of interim leases of facilities which are likely to lead to final disposition once the operators have had adequate experience as to peacetime costs. This consideration is particularly import-

ant for petroleum refining and certain chemical operations in the Southwest. Some assistance to these newer industrial regions seems likely to be gained from the development of multiple tenancy arrangements. At the present time, the War Assets Corporation is leasing space to manufacturers at the Aircraft Modification Plant in Birmingham on such a basis. Although the Corporation is making every effort to sell or lease facilities to a single operator and to get out of the industrial real estate business as far as possible, it is prepared to operate a plant on a multiple tenancy basis if there are no other demands and if a number of small producers are looking for space and machinery. Unfortunately, there is a dearth of small separate plants. There has been some interest by private investors in buying or leasing plants for multiple tenancy operation, but the cost and uncertainties of the initial period has deterred any such arrangement to date.

Another possibility which promises some assistance in using large war plants in agricultural areas is the development of co-operatives. It may be feasible for a group of farmers and merchants to raise sufficient capital to convert a large ordnance group of manufacturing units to a variety of manufacturing and commercial enterprises. Smokeless powder projects and ammunition loading plants, for example, may furnish a basis for such a combined venture because they have a number of isolated buildings with many central utilities. Such ventures are under consideration at a few plants in the South and West.

As the best available space is disposed of in the main manufacturing belt, there is bound to be more interest in facilities in the South and Midwest. In some instances, large national corporations are considering these outlying facilities as part of a general plan of decentralization.

Even with these possible favorable factors, the peacetime use of war facilities will be less advantageous to the West and South than to the older industrial Northeast. These outlying regions, however, stand to gain much from the new plant investment of the next few years, which will be based in part on the retention of a significant share of the wartime increase in population.

COST AND REGIONAL DISTRIBUTION OF ALL GOVERNMENT FINANCED WAR PLANTS AND OF PLANTS SOLD AND LEASED TO DECEMBER 31, 1945

(Dollars in Millions)

	Total	*Sales*	*Commercial Leases*
UNITED STATES	15,800	168	212
	Percentage of U.S.	*Percentage of U.S.*	*Percentage of U.S.*
New England	4.8	0.2	.0
Middle Atlantic (including Maryland)	19.2	43.8	40.5
East North Central	31.6	42.0	40.1
West North Central	8.4	5.1	6.0
South Atlantic (excluding Maryland)	5.2	3.6	0.3
East South Central	6.4	1.2	.0
West South Central	11.6	3.1	7.7
Mountain	4.2	0.2	0.3
Pacific	8.6	0.8	5.1

FRANCIS M. BODDY: The principal question which is raised by the analysis of the prewar and war shifts in the structure and geographic location of industry presented in Mr. Stewart's paper is the extent to which the distortions arising out of the war may control the postwar patterns.

It may be argued that manufacturing will play a dominant role in the determination of these new patterns, not only because of the great weight of this factor in determining the shifts during the war and the numerical weight that the stability or shifts of these workers industrially or geographically will have on the postwar patterns, but also because of the importance of these factors in determining the locational and industrial patterns in such other industries as construction, trade, and services.

It is true, as Mr. Stewart has demonstrated, that the general picture of the immediate prewar and war years was that of an accentuation of trend, particularly in the locational aspects of the problem. If one looks back to an earlier period, however, as from 1929 to 1939, there are some interesting exceptions to this generalization. The industrialization of North and South Carolina (and to a lesser extent Tennessee and Georgia) was not continued to any great extent during the war, and the great expansion during the war on the West Coast was almost a countermovement to the trend in the previous decade insofar as manufacturing was concerned. The rise of the West Coast industrially belongs to a still earlier period. A further exception may be noted in the great increases which took place during the war in a chain of cities and industrial areas running from Minneapolis-St. Paul through Des Moines, Kansas City, Wichita, Tulsa, Fort Worth, Dallas, and Houston which would not have been indicated by earlier trends.

While the migration and population trends during the war period also indicated an accentuation of the movements during 1935–40, it may be worth noting that in the earlier period the migrations were caused in great part by factors which *pushed* people out of depressed areas, while the wartime migrations were caused by *pulls* toward war production centers supplemented by extremely active aids and controls on the part of the government and of the major producers.

The prospects of maintaining a high level of general economic activity and of manufacturing in particular for the immediate future appears to be quite good in view of the rapid conversion which is taking place and the low levels of unemployment, but whether manufacturing can maintain its wartime levels and, if so, whether it can be maintained in the war production areas are both rather more doubtful.

It appears particularly doubtful that the war-boom areas on the Pacific Coast and in the central part of the country can expect to maintain their war workers in peacetime industry. The war facilities in these areas are, generally speaking, much less adaptable to the production of peacetime products, and the earlier trends in industrial location did not indicate that these areas had been so attractive with respect to the location of civilian markets, power, raw materials, labor, and to the whole complex of related industries and services so necessary to support an industrial community

as to permit a forecast that normal trends would support or catch up with the war expansion.

The fact that population and labor supply and some adaptable industrial plants and services are now at these locations is a distinct advantage, however, for perhaps the costs of inducing such movements to the areas were partial explanations for the lack of rapid growth earlier. Because of these factors expansion of industry may be expected to be maintained at somewhat higher levels than would have been probable without such wartime shifts. On balance, however, it seems likely that such factors would hardly be sufficient to discount completely the earlier trends.

On the other hand, the trend of industrial expansion in earlier decades in North and South Carolina and Tennessee and Georgia which was interrupted by the war may be expected to resume as manufacturing resumes civilian production.

The change in freight-rate structure, proposed changes in the minimum wage laws, the ultimate locational preferences of returning servicemen, housing shortages, new electric power developments, differential rates of population growth, and the ingenuity of businessmen in adapting and developing local resources and war facilities to peacetime production will all have their effects on the future pattern of industry. The relative stability and dominance of the main industrial area of the country, north of the Ohio and east of the Mississippi rivers, in the period from 1919 to 1939 would indicate that growth into new areas will come slowly and will not remove the center of gravity of manufacturing from the established area for a long time to come.

Ewald T. Grether: My comments will be directed only to Dr. Heflebower's paper. I shall discuss briefly four interrelated sets of factors; namely, product differentiation and brand promotion, vertical market integration, the geographical dispersion of industry especially to the West, and the effects of the war upon small-scale manufacturing in relation to the long-run postwar outlook.

Since the seventies, product differentiation and its most important manifestation—brand promotion—have been growing apace in the United States. There have been a number of interlinked factors responsible for this general tendency including: (1) the inherent profit advantages (once the book publishers and patent medicine purveyors had demonstrated the possibilities); (2) the growth of our broad and rich internal free trade market, through rapid means of transportation and communication; (3) the technological advances in the printing, paper, and allied industries and arts; (4) the improvement of packaging media and equipment as a reaction both to changing conceptions of health and hygiene and marketing needs; and (5) important developments in our legal and regulative system, especially trade-mark and patent law, which became crystallized during the brief interlude when laissez faire and *caveat emptor* were at a peak, and antitrust legislation, which served to shift interest from group devices for market-sharing to individual brand promotion.

Evidences (admittedly incomplete) of the extent to which product differentiation through brand promotion had developed in the United States between the Civil War and World War II are the following:

1. Per capita advertising expenditures in newspapers and periodicals, which increased from $0.22 in 1865 to $0.78 in 1880 to a peak of $9.22 in 1929.[1]

2. The rapid expansion of the use of brands and trademarks in marketing and sales promotion. Beginning with the tiny trickle of 121 registered trade-marks in 1870, federal registration become a veritable flood, so that by January 1, 1941, 384,046 trademarks had been listed in Washington. But this astounding figure was far below the actual number in use; it is estimated that in recent times a million or more brands have been in use or held for use by American firms.[2]

3. The dominant position achieved in many of our markets by the leading national brands. Space cannot be taken here to record the evidence, but in many industries a small oligopoly of firms sit securely at the top of the market. There are, of course, important exceptions.

I agree with Dr. Heflebower that price regulations as promulgated and enforced, wartime scarcities and rationing, the excess profits tax, and priorities system as administered, and the expansion of money incomes—all combined (with notable exceptions) to solidify and often even to improve the relative position of the national firms with leading brands and to conserve our whole system of product differentiation through brand promotion. There will no doubt be a great boom in the next few years in brand promotion and in advertising, similar to, but of greater magnitude than, that following World War I. Undoubtedly, too, the national firms with highly publicized brands will lead the pack. There will of course be some shifting in ranks, some successes on the part of new or small- and medium-size firms, but the leading pretenders to the throne will be the large distributors with their own brands.

Horizontal and vertical market integration have also been accelerated during the war. I shall comment briefly only upon the latter. The prewar drift towards vertical integration became more pronounced during the war because of the shortages of supplies to distributors, the desires of manufacturers to build postwar outlets, and the possibilities under the excess profits tax as administered. One of the most interesting developments was the acquisition of packing, processing, and manufacturing facilities by distributors who were unable to maintain their private brands or even acquire ordinary supplies from normal prewar sources. I doubt whether facilities thus acquired will be relinquished readily. In my view, vertical integration may be expected to extend its authority over our marketing channels either through outright ownership or through contractual arrangements in the absence of new legal barriers. But judging from the prewar straws in the wind, such barriers may very well appear

[1] F. Presbrey, *The History and Development of Advertising*, p. 591; N. H. Borden, *The Economic Effects of Advertising*, p. 48.
[2] Borden, *op. cit.*, p. 29.

through special legislation, action by administrative tribunals, and judicial interpretation. It should be noted, however, that actually we know very little about the economies and diseconomies of vertical integration, especially backward integration by distributors. This is a fruitful field for economic analysis.

One of the outstanding wartime effects is the acceleration of industrialization in the Far West, especially in California. My observation of the developments in the West has convinced me that a large portion of the wartime gains will be maintained. There will, of course, be some shifting about and some loss of momentum because of shortages of equipment and materials. For instance, some eastern steel firms are no longer accepting orders on the Pacific Coast. The industries which were badly out of balance, such as aircraft manufacture and shipbuilding, are in the process of rapid contraction. But in the net, the Far West will be well ahead of its prewar position industrially. An important aspect of this industrial development is a major movement of national firms into branch plant operation on the Coast, especially in California.

Dr. Heflebower discussed the effects of wage standardization through collective bargaining upon industrial decentralization. I have observed in California that it is the local independent enterprises that complain most of competition from low-wage-cost areas, whereas national firms with experience elsewhere in a number of instances have stated that their labor costs do not vary significantly between locations or that wage differentials are offset by the advantages of regional production. A study of the comparative labor costs of the branches of national firms operating throughout the United States would be most illuminating both as to the facts themselves and as a guide for interregional wage policy.

Finally, there is the problem of the effects of the war upon the small-scale manufacturers in relation to their postwar outlook. During the war thousands of small producers have been equipped better than before and have developed strong financial reserves. During the immediate postwar years of lush markets some of these firms will have an unprecedented opportunity to improve their market positions, especially if they have maintained their prewar connections.

The serious national problem, however, arises out of the thousands of war subcontractors who demonstrated excellent productive capacities under wartime arrangements but have no prewar market groove into which to settle. The casualty rate in this group will inevitably be high; some portion of this loss must be charged to war costs. Many of these subcontractors are now gadgeteers, offering their potato mashers, skillets, dust pans, fire screens, etc., to distributor after distributor. Their chief handicaps are not financial but lack of knowledge and ability in marketing, the competition of established, full-line firms, and the preference of local jobbers for the lines of established, national, and regional firms who give them both market reputation and protection. Many of these wartime subcontractors will survive only if they succeed in resuming their roles as subcontractors. In some cases this will be feasible, as for instance in making parts for automobile

manufacturers or in building products for the private brands of distributors. The immediate opportunities of this type, however, will take care of only the larger and better equipped firms. Another portion will be salvaged through absorption by established national and regional manufacturers. Yet another portion of the group might be able to survive through the organization of strong co-operative associations in which they would accept some central office supervision in production and transfer most of the marketing responsibility to the central organization while retaining individual ownership. Why should not the federal government foster this type of organized effort among small-scale manufacturers as it has among small-scale farmers? A large export market, as in the Orient, might allow the federal government to work out a means of subcontracting which would utilize many of the wartime subcontractors. The point is that it is not lack of technical know-how, tooling, and labor skill that will close these plants, but inability to compete in marketing.

Organized labor, it has been noted, carries a heavy responsibility both with respect to geographical concentration and the maintenance of small, independent operating units. Is it true that organized labor actually prefers to deal with large firms? There certainly is much evidence to this effect. Conditions are so diverse as to make simple, over-all generalizations treacherous. It would be useful to contrast the policies of organized labor in those industries which are in the hands of a small number of large firms with those with a considerable scattering among medium- and small-size firms. Perhaps we are too much impressed by the publicity given to recent developments in the large-scale industries. Most likely, too, much of the program of organized labor is opportunistic and not grounded upon a consideration of long-run results and implications.

A final word. Within ten years we may very well be forced to resurvey this whole set of problems if atomic energy at low cost has widespread industrial application. Such industrial use could not conceivably produce the "atomistic" competition of economic verbiage, but it might make for wide decentralization geographically as well as assist in equalizing the opportunities of smaller local and regional enterprises.

Donald B. Woodward: I should like to raise three questions regarding this most intriguing paper.

The first question is whether Dr. Seltzer would set forth in accounting detail just what transactions would occur when a bank would make a loan with the Certificate Reserve Plan in effect; if this could be done in the *Proceedings* issue of the *Review* as a supplement to his paper, it would be most helpful to many of use who are trying to understand the plan. In making this suggestion I do not mean to inject technical obscurantism, but rather to try to see just what, in his concept, the system would mean in operation.

Subject to correction by Dr. Seltzer, the Certificate Reserve Plan, when in effect after the changeover, seems to me to mean one or both of the following two points to our monetary system: first, changes in the money

supply would be exaggerated; second, the burden on Federal Reserve credit would be increased.

The money supply would be made more unstable, I should think, if the Treasury made any disposition of the proceeds from sale of Reserve Certificates other than holding them sterile, because in that event every $100.00 bank loan would mean $285.71 credit expansion—assuming that the Reserve Certificate requirements were 65 per cent, that the Treasury does not hold proceeds from Certificate sale sterile, but disposes of them so that a new deposit results and that the bank has unlimited excess reserves. The burden on Federal Reserve credit would be increased by 186 per cent if the Treasury did not hold the proceeds sterile and by 325 per cent if it did; in the first instance reserve requirements resulting from a $100.00 loan would be $57.14 (required on $285.71 of deposits), instead of $20.00 and in the second instance, $85.00 (increase in reserves for $100.00 new deposit plus $65.00 taken by the Treasury) instead of $20.00. The example accounts for only two of the possible conditions; i.e., that in which the bank has large excess reserves and the Treasury *does* spend the proceeds from certificate sale and that in which the bank has large excess reserves and the bank *does not* spend the proceeds. Other cases would be those in which the bank has no excess reserves and therefore (1) sells assets, (2) borrows from the federal, or (3) the federal carries out open-market operations; in each of the three cases, the Treasury may, or may not, spend the proceeds. The arithmetic results would differ in each case, but in most the money supply would be made more unstable and in all the burden on Federal Reserve credit increased.

Still subject to correction by Dr. Seltzer, the Plan would also seem to have certain odd effects upon the Treasury. If the Treasury held proceeds from Reserve Certificate sale sterile, it would pay interest on idle funds, a practice not very appealing politically and for which not many years ago it was roundly criticized. If it did *not* hold the funds sterile it would be obliged to use tax or borrowing proceeds to redeem Reserve Certificates when they were presented, which would be in time of credit deflation. For the Treasury to be carry on operations that would still further decrease velocity in time of deflation might not be popular with many, including, I suspect, quite a few members of this Association.

Finally, and still subject to correction, the Plan would seem to operate with questionable equity and dubious desirability on the banks. Those banks which would be doing the best and most aggressive job in financing business would be most restricted, and, at the changeover, most penalized. Would this be wise public policy?

These reasons for making the suggestion that Dr. Seltzer spell out the operation of his plan in accounting detail may result entirely from misconceptions on my part. But I have talked to enough other people who are puzzled as to just how it would work to feel that considerable detailed clarification is needed.

My second question is less mecharical. How is the operation of this Plan to be reconciled with the condition in the markets today? The Plan is in-

tended, as I understand it, to restrict further rises in the money supply through lessening the creation of new bank deposits and at the same time, to perpetuate the ineffably Elysian effects of low and ever lower money rates. But the condition of the market today is one in which very low yields on government and other high grade securities exist solely because of bank purchase. You need only to look at the difference in yield between the two $2\frac{1}{2}$ per cent United States Government issues of 1967–72 which are not eligible for banks and the one of 1967–72 which is eligible, to see the point. Present yields would not exist but for bank buying, which, of course, increases deposits. Thus, if the plan is to limit the rate of monetary expansion, interest rates will not remain as low as they are; while if the present interest rates are maintained, we may confidently expect to see the continued gravitation of the entire public debt toward the banks with consequent monetary expansion. It is one of those cases of the mutual incompatibility of *having* that substance Marie Antoinette once recommended for French diet and of polishing the esophagus with it.

My third question is much more general and requires a preface. The conditions which Dr. Seltzer reports with some accuracy as existing in this "changed environment of monetary-banking policy" represent, among other things, a state of mind and fact at odds with the state of mind and facts of the nineteenth and early twentieth century, that far distant period before World War I. They represent a state of mind in which it is often deemed sophisticated to scoff—which Dr. Seltzer carefully refrains from doing—at the ideas of that truly antediluvian period.

That was a period which predicated its policies upon belief in the propensity of society to use its resources, if but permitted to do so, in a way to produce high employment and prosperity, and not upon an asserted "secular tendency toward contraction." It was a period in which government was "charged with a greater measure of direct responsibility" to treat all men as equals endowed with certain inalienable rights. It was a period when the deliberate promotion and maintenance of low interest rates—and ever lower ones—had not been conceived. It was a period when there had *not* been "a marked diminution in the influence of traditional and mechanical criteria of monetary policy upon the attitude of the public toward monetary management." It was a period when there *was* a "repugnance to direct government controls." It was a period when there were few new monetary tools to co-ordinate, and one in which we were *not* blessed by "a *new* conception of the possibilities of fiscal policy." It was one in which the significance of interest rates to the government's budgetary requirements was so deeply realized that debt was repaid. It was a period in which the free market place was the arbiter of conflicting forces and the consumer was enthroned as dictator.

Interestingly, it was a period when many of the problems which beset us in this period were absent. Employment was higher and more sustained than during the last fifteen years with their many theoretical and popular discoveries. Production and the standard of living rose more than in any period of history, and at a faster rate than in any period of history. Men

were, I believe, freer, and there was more peace and confidence of peace.

In short, while in this "changed environment" which Dr. Seltzer accurately reports, it is sophisticated to scoff at those generations, in words, the fact is that to a marked degree their accomplishments scoff at us.

My question is whether, in seeking after monetary and banking policies and mechanisms—yes, and economic policies and mechanisms too—we might not do well to spend a little time to look again to see if the beliefs of that period were *all* bad, to see why our words scoff at them, but their accomplishments scoff at us. I am not nostalgic about the evils of the period, but I do wonder if there are at least some timbers in that house which should not be burned to roast the pig.

RALPH A. YOUNG: Professor Seltzer has rendered a valuable service by his efforts to think through afresh the problem of monetary and banking policy in a changed environment. His analysis shows deep insight into the many changes during recent years in the financial processes of the economy, and in the climate of opinion relating to them. Certain points in his analysis need to be underscored; others, particularly with reference to his general conclusions and proposed solution to the current problem, are at least open to question.

One general observation is in order at the outset. Dr. Seltzer has traced effectively the broad tendencies that have led to the current crisis in monetary and banking policy. But can the problems of the next decade, or even of the transition period, be accurately inferred and defined by projecting these tendencies?

Some of the tendencies that Dr. Seltzer has traced are likely to change rapidly for a variety of reasons—particularly those tendencies that fall under his category "climate of opinion." Others are perhaps less variable, but even these are subject to change. Take, for example, the possible course of bank loans to private business in relation to other bank assets, which Dr. Seltzer apparently believes will be downward because of basic structural change in financial practices and processes. His belief may be borne out in the future, but his analysis gives little weight to three important influences that might affect the outcome. The first of these is the cumulative effect of changes and adaptations in bank lending practices during the past ten years, including the development of special methods for financing both large business and medium-sized and small business. A second influence is the possible course of general business activity; experience suggests that if expansion of business activity (discounting mild cyclical swings) is sustained when commodity and service prices are stable or rising, then growth in bank lending to business will also occur. A third influence is interest rates and tax rates applicable to corporate income; at current levels of these rates, debt financing is the cheapest form of business financing, and the prospect is that for some time it will remain so.

This preliminary observation is merely to suggest that the monetary and banking problem ahead may not be precisely as Dr. Seltzer's paper envisions it, and that his proposed solution, the securities reserve plan, may therefore not fully attain the ends that he foresees.

Without undertaking to pass a final judgment on Dr. Seltzer's plan, it is relevant to point out that it proposes two important changes in the monetary and banking system. The first is the substitution of centralized bank management for individual bank management of government security portfolios held by banks. The second is an elaboration of the regulatory and control mechanism of the banking system, involving perhaps the extension of powers and jurisdiction of particular agencies, within an already complicated regulatory and control structure. These proposed changes should receive careful study and discussion before a Securities Reserve Plan along the lines he recommends is considered for adoption.

From the development of Dr. Seltzer's paper it seems fair to infer that his concern is with four basic issues: (1) the risks to financial stability of higher interest rates; (2) the wartime increase in bank earnings, especially from holdings of, and trading in, government securities; (3) the private lending function of banks; (4) the control of bank credit expansion. His Securities Reserve Plan is proposed as "the simplest and most nearly adequate solution to the major banking problems arising out of the public debt"; in other words, as a solution that would deal simultaneously, though with varying effect, with these four issues. A number of pertinent questions with respect to each of the basic issues seem to be unanswered, however, in his analysis. Let us consider first the interest rate problem.

1. If the principal objective of monetary and banking policy is to maintain interest rates at low levels, in order to protect the market value of the federal debt and to limit the debt charge in the federal budget, cannot this objective be attained as well without the Securities Reserve Plan as with it? If the principal objective is to control price inflation, would not that objective conflict with interest rate control as much under the Securities Reserve Plan as under existing arrangements? In this connection, if his Plan were in operation and an active demand for bank credit should develop from private business, would not a rise in interest rates on business loans result, which would be transmitted to interest rates on marketable government obligations?

2. Would his plan effectively insulate the structure and level of market interest rates from the effects of changes in primary bank reserves?

3. Would not the 1 per cent rate on Reserve Certificates which Dr. Seltzer proposes lead at once to the abandonment of the present pattern of market rates and to the establishment of a 1 per cent level for short-term rates? What would be the effects of this change?

4. How great are the risks to the financial markets and to the economy of an adjustment in the pattern of market interest rates, and of a rise in the level of such rates, so far as the response of banks and other institutional investors is concerned? Will such investors respond to the threat of higher interest rates by liquidating governments in disorderly fashion? And if they liquidate, to whom will they sell?

With regard to the problem of bank earnings, certain questions also arise.

1. If public opinion comes to accept the view that bank earnings—because of holdings of governments—are a problem of vital concern, why not attack the problem by imposing some form of franchise tax? (Dr. Seltzer

proposes such a tax as a supplement to his plan. Why apply both his plan and a franchise tax to control bank earnings?)

2. Is the relation of bank portfolios of government securities to deposits sufficiently uniform in different institutions so that the plan could be introduced without serious adjustment difficulties?

As for the lending function of banks, would the advantages claimed for the Securities Reserve Plan actually materialize?

1. Under adaptations already made in the banking system, are not government securities now considered by bankers to be virtually riskless assets? Would making them completely riskless increase the willingness of banks to assume risks of lending to private business? Would such a step actually be tantamount to a huge increase in the capital of the banking system? (An important factor here would be the terms under which the Plan would be put into effect.)

2. What is the relation between bank earnings and the willingness of banks to assume private lending risks? To what degree has improvement of bank earnings since the mid-thirties been a factor in the development or adaptation by banks of new methods of lending to business?

3. Are not banks themselves concerned, for political reasons, over the declining proportion of business and other loans to total assets? Is not the political influence likely to be as forceful as any other in liberalizing bank lending policies in the period ahead?

Finally, there is a question about the utility of the Securities Reserve Plan for the control of bank credit expansion. Dr. Seltzer recognizes that present reserve requirements would continue to govern bank credit expansion and determine its upper limit, but suggests that the credit expansion effects of increases in bank reserves might be controlled by limiting the additional availability of reserve securities, at the discretion of Federal Reserve or Treasury officials. But what if the Treasury's budget or debt management requirements necessitated additional market financing at the same time that monetary-banking policy called for curbing the credit expansion of the banking system? How would the conflict between the objectives of monetary-banking management and those of debt management be resolved?

There are still other questions to be answered, for the issues to which the Securities Reserve Plan is directed are complicated and ramify throughout the financial system. The important point to stress is that Dr. Seltzer's plan is advanced as a formula to solve or help solve simultaneously several critical monetary and banking problems. Whether or not the utility of his plan is so varied is doubtful. The questions raised here suggest the need for further clarification and delimitation of objectives. A major problem which his plan is evidently not designed to meet is that of getting the banking system to hold a smaller share of the federal debt and the public a larger share, without seriously disrupting the pattern and level of market interest rates and of commodity and service prices. If this problem could be solved, the issues to which Dr. Seltzer directs his Plan would be modified, and the advantages claimed for it would be altered.

NEW FRONTIERS IN ECONOMIC THOUGHT

IMMUTABLE LAW IN ECONOMICS: ITS REALITY AND LIMITATIONS[1]

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This paper has for the author the disappointing character of an experiment with negative results, plus the humiliation of realizing that this outcome should have been foreseen from the start. The project of stating briefly and simply the main axioms or "assumptions" of economic theory and their immediate general implications has long appealed to the author. But the effort to do it in the scope of a program paper has served chiefly to clarify the reasons why it cannot be done, and why the fruits of the attempt are not likely to command wide assent. One is led head-on into all the issues of "scope and method" that have consumed in controversy so much of the labor of writers and readers since the birth of modern economics. Such controversies have appeared to subside of late because men have either worked at practical problems without attempting to make their assumptions explicit or have set up mathematical postulates without much interest in their relevance to reality and its problems. The quest for universals (universal is a better single word than immutable for the essential idea of our subject), either in economic reality or in men's thinking about it, runs into eerie abstraction in which few are deeply interested and on which little agreement is to be expected among those who are; the views of any individual are likely to be regarded by others as dogmatic or as mere hobby-riding.

Significant universality is possible only in relation to some field of subject matter, delimited in some way, and ultimately defined by the generalizations one makes regarding it. We begin by assuming that the term "economic" refers primarily to some sector or aspect of human conduct, and that economic laws must be found as a species within this area. We also exclude at once (as far as possible) "moral" and other mandatory or hortatory meanings, leaving law as a true statement having some degree of generality—universality for the subject matter to which it applies—in contrast with statements describing a thing or event at a particular moment of time and point in space. A law may be scientific or historical, and empirical or deductive in basis; the problems suggested cannot be discussed here, but the distinctions must be kept in mind. In the jargon of the positive philosophy, or "scientism," laws describe "uniformities of coexistence or sequence." The second are the

[1] What is printed here is a considerably expanded and reworked version of the paper read at the Cleveland meeting. It is still but a survey of the topic, and the author is acutely aware of the superficial character of the treatment at many points.

more interesting, particularly in connection with conduct, which is a process or has a time dimension, and with reference to action; i.e., "prediction and control." We shall speak primarily of laws descriptive in some sense of the course of events that will follow (certainly or more or less probably) under some stated conditions.

For comparison one may have in mind the elementary principles or arithmetic and plane (Euclidian) geometry, which doubtless are the best examples of "universal and immutable law." As ordinarily understood, such principles do not involve time, though most (if not all) of the propositions of mathematics can be viewed as stating results that will be obtained by performing specified operations. And they can be empirically verified, to any degree of accuracy and generality that is thought worth the cost, which is not true of economic laws, since these relate to a subjective intention. On the other hand, the laws of mechanics, universal for matter and motion, have in the ordinary form a time dimension, but they are made to apply to a point-moment by differentiation and statement in terms of velocity and acceleration instead of measured time and distance. These laws are assumed to hold regardless of compounding and offsetting of different forces or motions—the principle of "composition and resolution." How far such analysis is valid or meaningful with respect to economic phenomena (or conduct in any view) is a field of inquiry little explored and which cannot be taken up here, but the highly composite character of the phenomena is an important fact. All general laws are necessarily "abstract" and empirically more or less inaccurate. The axioms and propositions of geometry are in all degrees "untrue" of actual figures; and addition and other operations of arithmetic are empirically invalid, since we never deal with perfectly homogeneous magnitudes; counting must ignore differences, and measurement is never exact. Thus general laws are strictly accurate only for concepts derived analytically from experience and formulated as "limiting cases." In many of the common examples we do not know whether recognition historically came first through empirical observation or through inference from axioms in the manner of mathematics today, or what was the connection with crudely practical concerns.

The question as to how far any law is really universal may be viewed either as one of objective fact—the uniformity and simplicity of nature —or as that of how far men ultimately think alike, or would do so if they thought "correctly." Neither question can be closely investigated, because we have no way of comparing either observations or ideas except through verbal communication (or other symbols), notoriously inaccurate and unreliable. In their empirical aspect, laws are qualified by recognized differences in observations and rest on general acceptance of

some "theory of errors" for determining when there is error and not actual diversity in the phenomena and for getting back of divergences to an approximate truth assumed to be uniform. These remarks are meant to show (what should hardly need statement) that when anyone asserts any statement to be a law he is stating a personal opinion; he may hold any degree of conviction that it will be accepted by others, or by the "competent"; but there is no point in making statements that are merely obvious and commonplace. In every sentence in such a paper as this, dealing with highly controversial material, the expression, "I submit as true and relevant," is to be understood at the appropriate point—and after this observation it need not be actually written again.

I

The root of the main problem with respect to laws of conduct of any kind lies in the differences in the nature and role or "purpose" of knowledge itself in different fields of subject matter, particularly the great "branches" (sciences in different senses of the word) that deal respectively with man and with the inert objects and processes of nature. A further source of difficulty is the role of the biological sciences, occupying a wide intermediate range; they must be taken into account, since the notion of "economy" (though not that of conduct!) is applied to organisms of every kind. The central difficulty undoubtedly arises from the fact that when men begin to "know themselves" they find that they are at the same time physical mechanisms and purposive subjects, as well as biological organisms with qualities belonging to the whole range of the evolutionary scale. In addition, man is at once knower and known, and user of knowledge. These facts make it impossible to make a clear separation between human and natural phenomena, or between the human phenomena that belong to different categories. It cannot be done either by classification or by quantitative analysis. Every human act has more or less the "aspect" of a mechanical response to a situation, of an "adaptive" response (or an "unsuccessful" attempt) and (if it is conscious) of rationality. And in rational purpose there are at least two distinct levels: the suitability of an act for realizing an end actually in view and conformity of the end itself to norms defined by "critical" judgments, of varying kind, objectivity, and validity. Finally, the "social context" of action presents a very distinctive problem in the relation of cause-and-effect to rationality.

In view of unconscious purposiveness, we cannot consider here the question whether economic law is universal in the sense that all human behavior has the economic quality or aspect, or whether this is true of all deliberate action, or precisely what is the universality of economic law. Our task is to try to state what men who have some standing as

economists mean in practice by economic behavior, insofar as they try to think and write in terms that define "economics" in a reasonable relation to other recognized disciplines. Most economists no doubt feel little interest in the question whether they are talking about economics or something else, and I am not passing judgment on this attitude; but one must assume that the question is real in order to write a paper on economic law. Attention will here be given first and primarily to "economic theory"; by this I mean only that the primary data are taken as a matter of common knowledge, in contrast with "empirical" procedure based on specially controlled or selected observations, treated by the special techniques of statistics or of historical criticism.

The next assumption is that the meaning of economics has some relation to that of economy, or economizing, in everyday usage. Economy is roughly synonymous with effciency; it is a matter of using means to achieve some end, and in such a way as to yield a larger rather than a smaller ratio of the result to the means—larger and smaller, again, meaning more or less valuable, by some measure and standard. At this point a sweeping restriction must be stated. In everyday usage, reference to greater or less economy or efficiency is commonly made in comparing technical processes, or differences in "technology." Economic theory deals with a different problem field, leaving technology to its various special disciplines, from shop practice and agronomy to cookery and artistic technique. This separation is made by assuming that technology is "given," that in using any means available to achieve a physically defined end that process will be chosen, among those known in the arts and science of the culture in question, which yields the largest ratio of output to input. The economic problem studied by economic theory is that of combining different lines of production-and-consumption in such proportions as to secure the largest total desired end or result, the "maximum satisfaction," from the given total stock of resources. Economy in this sense is thus relative to three sets of data: (1) the various ends of the individual (or other subject) in his (or its) estimation of relative importance; (2) the concrete means under the subject's control, including personal capacities and external things or materials; and (3) technique or technology. In most actual choices, technical and allocative problems are combined; but the two kinds are analytically distinct and in large part empirically, also. Ultimately, of course, all efficiency is a value relation; physical efficiency is logically a self-contradiction, or an elliptical expression.

Besides individually using means more or less effectively to realize ends, human beings also *co-operate* in their economic life, and *organize* action socially, as one way of increasing its effectiveness; and some general and true statements can be made about economic organization, also.

Thus the first half of our subject falls at once into two main divisions—the "laws" of individual (or other unit) economy and those of co-operative association. Discussion of the laws will naturally include a rough formulation of the more general of them, and cannot be entirely separated from the second half of the topic, the "limitations" of particular laws and of the whole category of economic law.

II

The first and primary economic law describes or defines individual economic behavior at a moment, in relation to the given ends, means, and technology, whatever these may be. Conformity to the principle of economic choice need not be thought of as automatic, but rather as the goal of effort, or an "equilibrium" to be achieved through experimental adjustments. The law is the (abstractly) fairly simple mathematical formula for maximizing a function of a number of variables (so related as to yield a maximum). Roughly stated in words, any means is to be allocated among its modes of use (in view of combining relations with others) so that equal small quantities of it make equal additions to the total end or result. This result is a composite of kinds of satisfaction; the common denominator or unit of quantity may be taken from any one kind, its equivalence to others being derived from the individual's preference scale or satisfaction function. The basic character of this law justifies naming it "the economic principle." Some common confusions regarding it may be avoided by thinking of it in relation to the behavior of an isolated individual, a Crusoe, though it applies to any unit in any social organization, regardless of its institutional form; even in a dictatorship or a slave economy, much the same choices have to be made, and the principles are the same, whoever makes them.

A second law of individual economy is also universal, though it may be stated as a special case of the first. In the conditions of the world in which we live and practice economy, the direct means of satisfaction are rarely indestructible agents whose services alone are enjoyed in consumption; the means themselves are usually worn out or used up—their useful properties destroyed. Hence, if the economic level is not to fall rapidly, "consumption goods" have to be maintained or replaced, giving rise to "production" in the usual meaning of making things, as distinct from the use and enjoyment of services. Maintenance (including replacement in whole or in part as conditions may require) is accomplished by "diverting" some part of the existing stock of resources to this use, at the sacrifice of "current" consumption that might have been enjoyed. The same factual conditions carry the possibility of *increasing* the total stock of resources (making more or better, in terms of more or better final products) and increasing the total flow of services, through further

diversion and current sacrifice. Such action is called "saving and investment," or "capital creation," as failure of maintenance is "disinvestment" or "consumption" (or "waste") of capital. (The question of precise quantitative definitions must be passed over.) The problem of maintaining or increasing productive capacity forces every economic subject constantly to compare "present" with "future" consumption or power to consume (accurately speaking, near future with more remote) and to apportion his resources between these two general fields of use, as well as among the innumerable alternatives within each.

Any increment of investment gives rise to a corresponding increment of income in perpetuity; i.e., unless and until the process is reversed in disinvestment; and since any particular investment makes an addition to a productive organization which, under realistic conditions, is continuously transformed, there is ordinarily no correspondence between increments of disinvestment and previous investment. Under rational economic behavior, all units of investment (or capital) in any area of economic comparison and choice will yield a uniform rate of return on their cost in consumption—the maximum to be secured in the economic situation. This rate of yield is perhaps best briefly defined as the rate of growth of capital (measured by potential perpetual yield for consumption) when its entire yield is rationally invested (not consumed). The rate of return on investment in any situation determines the rental value of all concrete agents, both men and things, to the extent that duplicates or equivalents of these can be produced at a cost; this cost fixes the momentary cash (capital) value—which may or may not be made objective by sale or by capital accounting. There is no general difference, in this connection, between what are called "natural" and other (artificial) agents; and human beings are in a special position only because in free society their values are not formally struck, and investment in their rearing and training is especially influenced by "noneconomic" considerations. All prices paid in the market for concrete things represent the "capitalization" of a future stream of services (rational investment makes this value equal to cost, using the same rate of return) and the rate of return also enters into the prices paid for services already received. All this is entirely independent of such transactions as lending at interest, or leasing; under economic conditions these two are different only in form and are also identically equivalent to partnership or other forms of co-operation.

In view of the necessity for physical production—maintenance, replacement, meliorative transformation, and increase of direct and indirect means of satisfaction—the allocation of resources (proportioning of kinds of consumption services) is carried out in many steps. Beginning with the composition of consumption itself, most of the direct agents

(including persons) are used in complementary relations, illustrated by the mixing and seasoning of food, artistry in dress and surroundings, etc. In this case the economic problem combines psychological and physical proportioning. (It may be described as technology at its very highest level.) At a next preceding stage, most consumption goods are produced by complementary combinations of indirect agents, which are to be proportioned for economy in accord with the terms on which they are available to any subject. And so on; the sequence is an intricate network and is ultimately circular, since most goods are consumed in mutually reproducing one another and man himself is a produced agent of production as well as a consumer. The nearest approach in reality to ultimate productive resources is found in the concept of capital. This means abstract quantitative "capacity," for producing satisfaction, through embodiment in one or another kind of productive agent, including direct or "consumption" goods. Concrete agents are quantities of capital, measured at the same time by the consumable value they yield and by the terms on which all are interconvertible through nonmaintenance (or recovery as profit) and replacement. The all-inclusive nature of the capital concept needs emphasis, in view of its traditional restriction to a special category of "capital goods," distinguished from natural agents and human beings (laborers). It really covers not only all forms of "property," as defined by any legal system, but human beings and their capacities, technology, and to some extent even wants (good will).

It has been found convenient to describe the conditions underlying the activity and problem of economic proportioning and apportioning in terms of two parallel laws, the one psychological and the other technological. They are conventionally called the laws of "diminishing utility" and "diminishing returns." The former states that as more of any direct service (or fixed combination) is consumed, under given conditions (including fixed quantities of other services), the smaller will be the increment of satisfaction derived from a given small increment of the means (continuing to satiation and then "disutility"). The physical law runs in the same terms, except that the means are indirect and the result a (less indirect) physical product. Usage in the profession calls both these principles economic laws, and it would be idle to insist on a clear logical distinction in general exposition between principles of economy as such and universal features of the conditions under which economy is practiced. (The two laws also exemplify the contrast between intuitive or a priori knowledge and that based on observation—or possibly two meanings of observation.)

The psychological law raises serious methodological problems which can only be cursorily noticed here. They center especially in the interpretation of the conventional word "marginal," which is to be under-

stood, if not explicitly included. ("Incremental" or "differential" would be a preferable term.) From the standpoint of action, hence of thought as a guide to action, all units of any supply once possessed (or assumed "given") are alike. Men are not supposed to estimate their total state of well-being, but only to compare alternatively possible changes. If we summate (integrate) all changes beginning with a zero supply of a good we reach the supposed paradox or "antinomy" that the total subjective value of an increasing supply reaches a maximum and declines, to zero and negative values. (One may ponder the abstract utility of water to a thirsty man in a desert and one caught in a flood and about to drown.) In recent discussion, considerable sound and fury have been generated over the proposal to state the "law" in purely proportional form (ratio of substitution) relative to a constant (indifference) level of satisfaction, and to recognize only "ordinal" variation (ranking) of total levels. The issue can be raised because psychological magnitudes are not measurable, in any of the numerous meanings of physical measurement, but only estimated by direct intuition. The proposed treatment is logically possible, and the mathematical economist who wants to work with "satisfaction functions," which are not available, will use the simplest form of "index function" that will represent the properties of the data, real or hypothetical, that he wishes to take into account. But there seems to be no question of the validity of the quantitative (cardinal) character of satisfaction changes—or anticipated satisfaction, or desire or motive, however conceived—and it is clearly useful for general exposition. The defensible alternative to the common-sense view would be to ignore psychology altogether and deal with the physical magnitudes, which are actually measurable. This "approach" has also been widely advocated and in part employed; the position raises one side of the central problem of the meaning and limitations of economic law, as a species under the genus laws-of-behavior, and will be considered later.

The familiar laws of cost and price are valid for an individual economy, in isolation or in organized society. (Price is of course an arbitrary accounting unit for a Crusoe.) The general law for supply is increasing cost, of one end-value in terms of another as sacrificed alternative (the only meaningful conception of cost). The principle of equilibrium is that product units of equal incremental utility shall also be equal in cost (be alternative product increments from the same transferable resources). The fundamental law of cost, fitting the case where all resources are completely fluid between uses, is merely an inverse statement of the psychological principle of proportionality; increase of output of one product decreases its incremental utility and increases that of alternative products through reduction of their output. (Value

cost increases for both reasons.) Practically more important as a ground of increasing cost is the fact that the mobility of different economic agents varies almost infinitely, as does also that of the capital embodied in them. In consequence, over humanly significant periods of time, expansion of the output of any product (total productive capacity constant) is effected by increasing the proportions of the more freely and quickly transferable agents and more liquid forms of capital, thus bringing into play the physical law of diminishing returns.

Within certain ranges of output variation cost typically decreases with output, because of improvement of proportions connected with discontinuous variation of size of agents ("lumpiness of factors"). The human being is ultimately the most important case. Many physical relations, such as the ratio of surface to volume, also cause efficiency of structures to vary with their size. In organized society, these phenomena raise the question of tendency to "natural" monopoly or competition, in relation to size and efficiency of the production unit. Two "cases" of cost variation in the "unit" (plant or firm) are generally recognized. One is called "short-run," where certain factors are assumed to be fixed and others subject to free increase or decrease; the other ("long-run") assumes all factors variable. For different reasons, both yield a U- or hammock-shaped curve. In the one case proportions change first favorably and then unfavorably; in the other, gains from increased specialization predominate at first and later are more than offset by increasing costs of co-ordination. A special problem is set by "management," where the role of the human being is different in kind from that of a laborer or other productive agent. But the long-run analysis undoubtedly holds, with qualifications, so that management cost at first decreases and then increases relative to output, as the organization increases in size.

III

We now turn formally to consider economic law at the social instead of the individual level. Here the broadest generalizations root in the fact that all "co-operative" relations may be viewed under the form of exchange. (The boundaries of the notion of co-operation itself are vague.) We "exchange" what are called economic goods, also dinner parties and conversation, friendship and even love, and much of our "giving" is informal exchange and may mediate tacit co-operation. (We also exchange abuse and blows, and it is hard to distinguish objectively between a prescribed punishment and setting a price on the privilege of illegal behavior.) Perhaps the hardest practical problem of definition is set by the exchange of obedience for direction, in organized action; witness the typical feeling of the employee that the employer or boss coerces him by arbitrary power. (But this feeling is common in other

relations, and often held by both parties.) Economic theory deals with "free" exchange—which we cannot here attempt to define. On any extended scale and under stable social conditions, it leads to the establishment of markets and a market organization of production—specialization and co-ordination of functions through prices. The mutual advantage of free exchange is now a truism among economists, though prior to the Enlightenment even the best minds assumed the contrary (that any gain by one party is a loss to the other), and the same notion is still widely reflected in discussion and in social policy. It is not clear whether the principle should be called "an economic law"; in any case it carries no implication of ideal social justice, since one-sided moral obligations may exist where the parties are in widely different circumstances as to needs or resources. The organization of production through exchange implies free choice of ends by individuals (or other units), hence choice of the modes of using means, hence control over the means.

A distinction should be made between an "exchange" organization in the literal meaning and a more advanced form in which production is carried on by organized groups or "enterprises." The more primitive system, in which the "individual" (or family, the minimum real unit in society) produces and exchanges a product, may be called a "handicraft" economy. In the enterprise form, specialization is carried much further; the individual does not make or dispose of a product, but performs a detailed operation, and other agents are correspondingly specialized in form and use. There are two sets of markets instead of one. Individuals buy products from enterprises and sell them productive services. "Money" is inevitably employed, but in the ideal adjustment pictured by pure theory it is reduced to a token or symbol, without value of its own, making purchase and sale equivalent to barter. (Synchronism might conceivably be secured through credit on open accounts.) The "perfect" market, of theory at its highest level of generality, is conventionally described as perfectly or purely "competitive." But use of this word is one of our worst misfortunes of terminology. There is no presumption of psychological competition, emulation, or rivalry, and this is rather contrary to the definition of economic behavior. Market relations are impersonal, between persons and goods; and persuasion or "bargaining" is also excluded. The nature of a market is simply effective intercommunication among buyers and sellers (actual or potential) with freedom to make and to accept or decline offers to trade. The meaning of "competition" is that they are numerous and act individually; "atomistic" is a better word for the idea.

The "law" of a competitive or atomistic market is uniform price, at a level which maximizes mutually beneficial trading. In the ideal market economy, all prices and all production will be so adjusted as to equalize

all ("marginal" or "unit") efficiencies, taking as end-values the choices of individuals under their actual circumstances. The market does not tend to equalize between individuals in any sense, and "scientific" (explanatory) economics does not make interindividual comparisons. (But they are necessary for discussion of most issues of social policy.) The equalization or equilibrium described maximizes the advantages of organization for each individual, subject to the condition of simultaneous advantage (equal in terms of exchange value) to all "other parties," as judged by each for himself, and with each using whatever "resources" he actually owns or controls (internal or external to his person). Under the idealized conditions of pure theory, the internal organization of enterprises is equivalent to exchange between individuals in a perfect market, and may be ignored. The ideal enterprise might be more or less approximated through some form of (democratic) producers' co-operation; in the typical real case, initiative and direction and responsibility for the result (risk-taking or uncertainty-bearing) are more or less concentrated in the hands of an "entrepreneur," an individual, partnership, or corporation who (or which) receives a distinctive "residual" income called "profit"—or, when negative, a loss.

IV

The occurrence of profit, or loss, is the most general symptom and consequence of "imperfect competition," due to imperfectly economic behavior. Preliminary to discussion of the difficult philosophical aspects of this problem, we may pass in review some more mechanical limitations of the laws of the perfect atomistic market and market economy. The first and most characteristic item is "monopoly," followed by the other members of the now familiar quartet of cacophonous denomination—monopsony, oligopoly, and oligopsony. In connection with these, the designation of economic law must be assigned somewhat arbitrarily. Every systematic limitation of a general law is of course another law of less general scope. How far such a series is to be carried is a matter of taste or judgment. I should class the principle of monopoly as an economic law, because in some degree the phenomenon is nearly universal, and it is entirely in accord with economic behavior on the part of all parties concerned, acting on the basis of immediate interest. Also because of the importance of monopoly, in an extreme but rather common degree, for public policy. Monopsony is theoretically similar (all profit is in a sense monopoly or monopsony gain) but practically far from parallel. Collusion and differentiation between buyers is unimportant in comparison with product differentiation and restriction of output, especially because of the creation of consumer appeal through advertising and sales technique, and such "adventitious" features in the

product as name, design, ornament, packaging, "services," suggestion or sheer "puffing," etc. The reasons for the predominance of seller initiative in the enterprise economy, and for accompaniments of the sort named, are important but cannot be explored here. Oligopoly and its opposite number do not seem to conform to any simple or reliable law, and the problem is too complex for brief notice. On the map of real productive organization a typical situation is "monopolistic competition," a combination of a small degree of monopoly with oligopoly in what may be called either an "industry" or "a group of industries"; they may show any distribution of profit and loss among the units. The pattern is further complicated by local monopoly based on transportation and other costs, of assembly of materials and distribution of product. All monopolies pass over into competition (often "cutthroat") in boundary zones. Still further irregularities result from agreements or tacit understandings in great variety, affecting prices, product, and distribution.

As suggested above, a common cause of imperfect competition is imperfectly economic behavior. One main cause of this in turn is limited knowledge, especially foreknowledge of the physical consequences of acts. (Limited knowledge of ends sets problems of a different order, to be considered later.) Monopoly itself, as we have seen, is closely connected with buyer ignorance of products, often fostered by deception or by lures other than true substantive utility—whatever that may mean.

One of the most important effects of limited knowledge and foresight is the painfully familiar and heatedly discussed phenomenon of unplanned and unwanted expansion and contraction of production, in particular industries and in the aggregate, associated with changing prices and price relations. These changes are themselves a leading source of profit, and loss. The basic fact underlying such more or less regular and cyclical movements is that, because of men's imperfect foresight, consequent adjustments lag behind their causes; this leads presently to overcompensation, and reversal and repetition in opposite directions alternately. The same facts might cause considerable oscillations in the activities of a Crusoe, with loss of efficiency; but they would hardly approach "unemployment" of resources. Certain features of behavior under the price organization greatly accentuate maladjustments. Correct planning of production by any unit calls for knowledge of future prices, and these depend on what others are going to do. To follow current prices would be disastrous, and market speculation is a crude mechanism for establishing reliable "futures" quotations. Accurate forecasting would be theoretically possible only through all-around collusion, which is incompatible with market organization. The major maladjustments center in the allocation of production between relatively permanent investment and current consumption. They are

multiplied by the speculative transfer of wealth holdings between real goods of various kinds and money ("hoarded" cash—with dealings in monetary claims in an intermediate role) as owners expect rising or falling prices. Hoarding and dishoarding affect prices so as to inhibit or stimulate investment, which reacts in the same direction upon consumption demand. These speculative movements are peculiarly self-stimulating and cumulative—instead of self-limiting and equilibrating. When men are really speculating on changes in the general price level their operations are especially characterized by an "irrationality" common to most markets: expectation of a movement in either direction stimulates conduct which brings about the expected change (hoped for or feared); and rising prices stimulate buying—and "real" investment, construction, etc.—and conversely. The tendency operates within limits, but in this case the "normal" or equilibrium position is vague and the extent to which conditions may diverge from it before reversal are correspondingly great. Practically all economic responses are more or less speculative; and the resulting tendency to set up oscillations affects practically every variable in a system. It may be regarded as an economic law, superposed upon and qualifying the more general one of movement toward equilibrium.

The recognized limitations of our knowledge of nature have as an important consequence economic activity in which means are used to extend knowledge, with a view to improving technique. This is a form of investment, though the gain to the investor tends to disappear by diffusion, and he must expect to recover the cost, with enough profit to induce him to make the venture, before this happens. The type includes all explorative and experimental activity, from surveying and probing the earth to physical, chemical, and biological research, and contriving and testing devices, processes and patterns of organization. The essential feature of such activities is that they are problem-solving, which means that the result can never be fully predicted in advance. Yet predictions are made, they have all degrees of validity in the individual case, and the principle of averages is applied to reduce error and risk, in spite of the theoretical difficulty that cases are unique and classes correspondingly unreal. Insofar as behavior is directed by knowledge, or belief, which is affected by error, the fact is a "limitation" on predictability and scientific law. Economic laws describe what men try to do rather than what they actually do; and even the former statement must be largely qualified because of the limited reality of given ends—to be discussed later. The ideal or limiting case of pure economic theory is impossible, self-contradictory; if behavior is perfectly economic it is not economic, but a purely mechanical response.

A serious limitation of economic laws from a scientific point of view is their highly abstract character. They run in terms of kinds of satis-

faction and kinds of things and their uses. Even if true they convey no information about the actual economic life in any situation—the means or ends or modes of using means—but only state relationships independent of content. In a complex and changing society, it would be impossible to make an accurate list under any of the three heads; and if one should make a list of wants in common-sense terms, and a list of means of satisfaction, there would be little or no correspondence between the two.

Critical scrutiny reveals yet more sweeping limitations of "theory," which assumes at least that there *are* concrete means, methods, and ends, which are really given, and in relation to which the state of equilibrium is described. Of the three sets of data, the means perhaps come closest to fitting the specification, for a particular subject at a particular moment; but even here there are reservations, since personal capacities cannot be sharply separated either from technology or from wants. Equilibrium is defined as a hypothetical "stationary" state that would be established if all the given conditions remained unchanged for a sufficient length of time. Since these framework conditions are in fact constantly changing, it is better thought of as a "moving" equilibrium, corresponding to the framework conditions ("independent variables") of the moment but differing markedly from the actual state of affairs. The more general principles are valid under changing conditions, and in most respects equilibrium would be realized empirically if all changes were correctly foreseen (far enough) by economic subjects. The last is still true, under suitable organization conditions, if a probability distribution for all kinds of change is known. But in fact, changes due to natural and historical causes are highly unpredictable, even on the average and in the long run; and the effects of investment are even theoretically unpredictable, for reasons already explained. The concrete conditions of any economic situation are always the product of "history," a mixture of nature, culture, and more or less deliberate and intelligent human action in the past. It is questionable whether history should be called a "science" or said to yield laws; and in any case these are to a small extent assimilable to economic laws. As pointed out above, if we picture economic activity purged of its problem-solving character, hence of error and uncertainty, either by reduction to an unvarying routine or through giving the subjects omniscient foresight, it will be an unconscious process and not economic, or only so in the sense in which we apply the term to plant life.

V

These reflections bring us to the most serious category of limitations of economic theory and its laws. Worse than ignorance of means and

their uses, or ignorance of "real" ends, is the evident fact that men do not really want accurate foreknowledge of the results of action, or want definite ends, or even in general want their wants satisfied. It has been observed that an irrational passion for dispassionate rationality would take the joy out of life, and complete satisfaction would clearly mean death. If a subject is to behave so as to maximize some magnitude such as "satisfaction," this must be quantitatively dependent on the means used and their mode of use; if it is to be done consciously the functional relation must be known; and insofar as action has to be planned ahead in time, the function must either be stable or its changes must be expressible by making its parameters known functions of time. But reflection shows that our conscious economic behavior fits these specifications only with important restrictions. Human interests are inherently explorative and experimental; we act largely to find out what we do want—or to effect or prevent change as such, not any particular change—or to conform to abstract ideals, to create or develop taste, or from pure curiosity; we work at problems with no thought that the result will make any difference in our lives if we get it, and expecting to forget the whole matter when success is achieved or the project given up. The concept of the economic man, or of instrumentally rational behavior, is valid and important, but only within limits set by these considerations, and others of a similar character. The economic man neither competes nor co-operates; his transactions with others are "impersonal," hence are not truly social, or human, relations. The perfect market would be one worked out through coin-in-the-slot machines, without human contact. Outside of his economic relations, the human being is devoted to family and friends (and avoids or contends against those he dislikes); inside them, as an economic man, he has no feelings, neither gives nor asks, commands nor obeys; he never plays, excepting perhaps solitaire, and in fact does not work, either.

What men really and finally seek in life is not so much particular ends as interesting action and experience; and a more realistic picture of the motives of economic pursuits is to be had from reflection upon play than upon utility curves or satisfaction functions. In play, the means-end relation is reversed; the objectives are set up arbitrarily or accidentally and are nothing in themselves; they are "means" for making the activity interesting. The interest or value of a game is not a "function" of the extent to which any one achieves his objectives, though there are both positive and negative relations. It depends on many other facts and conditions, some too subtle for any formula. In particular, unpredictability, or "luck," is essential to the interest, along with "capacity," but in a sense prior in importance; games of pure chance abound, but a game of pure skill, or strength, or intelligence, is

a contradiction in terms. (A perfectly intelligent man could not play chess—nor poker, nor dice, if the concept is taken rigorously, implying either perfect foresight or exhaustive knowledge of probabilities.) Of the nature of play is the reality of economic life. The ends are largely symbolic, of such purely formal interests as curiosity, success, progress toward "perfection," social conformity or distinction. We are "keeping up with the Jones's," or keeping them from keeping up with us. The play pattern is highly important for ethics and policy problems, notably as opposing or qualifying the ideals of "giving" and equality. Such objective (nonsymbolic) reality as concrete ends have in civilized life is chiefly aesthetic in a very inclusive sense (not overlooking humor) and the content of ends is in large part conventional and an accident of the culture situation. This is true of our wants for food, clothing, and shelter, of sex and family life, and more so as we move up the scale into the higher or more spiritual interests. These facts imply that the concrete reality of economic behavior must be studied in its particular social context, and this in turn studied in terms of its history.

The course of the argument should have made it clear why it is impossible to make a complete or definite list of economic laws. The nearest approach would be a translation into words of some of the various systems of simultaneous equations set up by the mathematician-economists. No clear distinction can be drawn between principles of economy as such and generalizations respecting the conditions or the situation in which men practice economy. Further, as this fact implies, laws have every degree of generality, from the universal to the unique case. And finally, and most important, the economic aspect of conduct is only one basis of generalization, and it is but vaguely separable from other aspects. It will also be clear how easy it is to make the assumptions of economic theory, and its "laws," appear absurd. Whatever an individual does is "assumed" to express his interests at the moment and to "maximize" his well-being in terms of them and under the circumstances—abstracting from predictive error. But since interests, and knowledge or belief, notoriously change, and often capriciously, the conditions which serve afterward to explain any past action will not fit future behavior. So, it is natural to ask, "What is the use?" From a scientific point of view, it seems fallacious to treat motives as data and use them for causal explanation. They seem to be, if not unreal, at best uncertain inference from behavior, which alone is directly observed; hence they form a distinct problem to be dealt with after behavior is explained. The "Occam's razor" principle is cited as telling us to ignore mental states, observe and measure responses to situations, and find such regularities as we can—in short, to write economics in "behavioristic" terms. And the same method would be used on a wider scale to study historical

backgrounds and comparative cultures, as far as such study is feasible and fruitful.

The reply to this plausible argument is that it just cannot be done, or must be auxiliary to other procedures. Men cannot think and talk about themselves and their fellows as if they were all merely inanimate mechanisms or plants. In fact, we are forced to interpret the lowest organic life in terms of function, a teleological concept, though we also study its behavior and physiological processes as physical and chemical phenomena. Even in physics, we inevitably use the notion of force, which is logically superfluous, in the same way as motives in the treatment of conduct. Force, indeed, does not cause the same difficulties, because it is known only by inference from its observed effects and measured by them, hence the correspondence must be exact, while of motives we have more direct knowledge, revealing discrepancies with conduct, due to error. A behavioristic economics, however, would be a paradox; since efficiency is a value relation, the elimination of this notion would destroy the distinction between economic and other behavior, and leave the name "economics" without meaning. And there is another difficulty, more important in a scientific view. The essence of science is generality; and social psychology tells us (as does common observation) that the feeling side or core of conduct is substantially universal in men, while both the situations in which particular drives to action arise and the behavior they occasion are infinitely various. A trifling circumstance may destroy a desire, or convert it into an aversion, or completely change the channel through which satisfaction is sought, without materially affecting the whole structure of desire and satisfaction. This fact does, indeed, seriously upset the use of motives for predicting behavior; but unfortunately, it likewise invalidates predictions based on the previous behavior sequence itself. And we do have some knowledge about conscious interests and their relations to situations and to responses, which has considerable predictive value and is imperatively used in interpretive thinking.

Such considerations force us back to the common-sense view of recognizing "economy" as a universal principle of rational action and exchange, and co-operation and competition as universal elements in social life. Economic laws, running in terms of means and ends, and meaning more than cause and effect, are merely a careful formulation of indubitable facts about these phenomena. As we observed at the outset, the reality of desire and satisfaction, and their general pattern of variation, are as well known as the axioms of arithmetic or the basic principles of mechanics. And critical examination of the negative reaction of the scientific mind to the notion of economic laws makes it clear that we must accept and use the principles of economy and exchange, in spite of our

craving for conceptual simplification. (Some more or less arbitrary bound must in any case be set to this urge, unless we are to become either skeptics or mystics.)

The reality of economy and its principles, as more than cause-and-effect or historical inevitability, does not, however, invalidate or replace the latter. As we have observed before, conduct has various aspects, not easy to separate, or to interrelate clearly. Purposive action is unthinkable in a vacuum; it means working with and utilizing (hence modifying) a substratum of natural and historical process, governed in the main by scientific law. To minds living in this natural-scientific age the idea of economic law being limited by causality seems like an inversion; the question is rather how far, if at all, problem-solving activity, affected by liability to error, can interfere with or "limit" a predestined natural course of events.

However, as our argument should also have made clear, there is another side to the notion of limitations of economic law. Another category, or perhaps several categories, of limitations come in from the opposite direction, as we may say, from supereconomic aspects of conduct, in contrast with natural or historical process as subeconomic. Man is distinguished from physical objects by "civilization" and by problem-solving intelligence. But intelligence includes much more than instrumental rationality. In particular, it confronts and solves problems in the selection of ends as well as of ways of using means to achieve given ends. The problem of ends is treated in the philosophy of values, commonly classified as goodness, beauty, and truth. It includes, also, the explorative interests and play, fun and "aimless" sociability, finally as important as the "serious" values. These supereconomic considerations are necessarily basic in all discussion of social policy, the ultimate ground of most of the significance of the study of economics.

This science, or discipline, grew up as "political economy" in and along with liberal civilization, in the period of the Enlightenment. Under liberal institutions the organization of the use of means is worked out primarily through association by free mutual consent and particularly through free exchange of goods and services in markets. The liberal social order rests on the ethical principle that, as far as possible, each person is to be the judge of his own ends, meaning that ends are not a problem for law and the state. The functions of government should be restricted to policing against force and fraud, enforcing general rules and providing "public works," of a noncontroversial character. But the ideal of the autonomy of the individual is subject to more limitations than the founders of liberalism realized, and these become more and more extensive as the scale of economic organization grows and inequality in ownership of resources and in other respects grows with it.

The scope of public economic policy is correspondingly extended, and discussion of such questions makes sense only in the light of judgments of approval and disapproval based on superindividual norms. The method of free co-operation through "atomistic" exchange becomes increasingly inadequate and has to yield to group action and group decision through agreement on what motives ought to be and how they ought to be expressed in conduct. Social life depends more and more on a consensus with respect to values or purposes that lie beyond ends defined by the psychological fact of desire, much as given ends lie beyond mechanical effects of causes, in a series of conceptual forms.

The problem of economic law is finally that of the relations between different aspects or views of conduct, the issues which underly the historical controversy over methods or approaches in economics. Basic at any point in time and space is undoubtedly the physical behavior mechanism of stimulus and response. Certain products and manifestations of behavior, separated out less by logic than by tradition or accident, may be studied inductively, through statistics of prices and quantities of things bought and sold, and this may be called "economics," without definite reference to the idea of economy as a principle of interpretation. But such content cannot be universal or stable. In any comprehensive view conduct must be related to culture history and to ends, and to ideals or values beyond ends. Social psychology and ethics and aesthetics force themselves into the picture because men are actually as much concerned about wanting or appreciating the "right" things—in innumerable meanings of the word—and having others do so, as they are about getting things they actually want. Economic laws in any very strict and distinctive meaning are reached through isolating by abstraction a particular aspect of conduct and ignoring much that is quite as real and important: The economic view is also important, intellectually and practically, but we must not make applications that disregard other and equally significant considerations. Account must be taken of all views or approaches, in their proper relations and perspective.

THE IMPACT OF THE GREAT DEPRESSION ON ECONOMIC THINKING

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In discussing the effect of the depression of the thirties on economic thinking, I am going to confine myself to the so-called "Keynesian revolution," for two reasons. In the first place, this movement coincides so closely with the Great Depression as to make a prima facie case for causal relationship of some sort. To be sure, none of the constituent ideas of the new theoretical pattern is itself a novelty. But the suddenness with which the pattern developed in the early thirties, the extraordinary rapidity with which it gained adherents, and the amazing response which was extended to *The General Theory of Employment, Interest, and Money*, all point to a shift of conviction and attitude of such a magnitude as to be inexplicable except in terms of a disturbance of comparable magnitude.

My second reason for concentrating on this impact is its superlative importance. The Great Depression has had many effects. But in the field of ideas no other is comparable to this one. As the common use of the expression, "the Keynesian revolution," goes to show, this fact is now generally recognized. Thus Sir William Beveridge speaks of "a new era of economic theorizing" having been "inaugurated by the publication" of *The General Theory*. There can be no question of the importance of that book. No economic treatise has enjoyed such a reception since the publication of *The Wealth of Nations*. Nevertheless we do not credit the classical way of thinking to the sole agency of Adam Smith, and doubtless Lord Keynes would be the first to insist that we should view his work in a similar perspective. As everybody knows, the movement which is now commonly identified with his name was in full swing before the appearance of *The General Theory*. The author of that book, whom I shall henceforth identify as J. M. Keynes after the example set by Sir William Beveridge, has provided us with a number of striking phrases: "the marginal efficiency of capital," "the propensity to consume," and the like; and these expressions now occur with amazing frequency throughout the current literature of economics. But I doubt if we shall understand the impact of the depression if we define our project in such terms. The Keynesian deviation has split the ranks of economists on a scale larger than that of any division since the time of Adam Smith because it cuts deep into the basic preconceptions on which all economic thinking rests. I venture to doubt whether even Marxism cuts as deep. What is now going on is a revolution in economic thinking comparable to the Darwinian revolution or even perhaps the Copernican revolution.

Catastrophic as they were, the events of the thirties could not have been the sole cause of a movement of this character. Doubtless that depression was uniquely educational. Doubtless, for example, the saturation of frontier regions in America and throughout the world threw mass unemployment into bolder relief than was ever the case before. Perhaps the open economic warfare of the period, sharpened as it was by world political chaos, emphasized the physical facts of overproduction. The decline of competition similarly spotlighted price rigidity and curtailment of output in the industrial field and the contrasting plight of agriculture. Meantime the development of central banking made the accumulation of excess reserves more conspicuous than ever before. It is also true that our educational facilities—statistical services, research institutes, and the like—were more nearly adequate to the pedagogical task than was the case on any previous occasion. The Federal Reserve Board index of physical production had its first depression workout, and studies such as the Brookings Institution's series on *America's Capacity to Produce, America's Capacity to Consume* and *The Formation of Capital* were widely read and unquestionably made a deep impression.

Nevertheless two considerations make it difficult for us to regard the Keynesian revolution as the direct result of these specific causes. One is the fact that none of these conditions was altogether new or even newly discovered, and the other is the difficulty of tracing the new trend of economic thinking to any particular discovery or insight. One of the most puzzling discoveries of this period has been the rediscovery of forgotten heretics. As we now see, they have been both more numerous and less misguided than we had supposed. I am especially impressed by the frequency with which businessmen have appeared in the role of heretic. Perhaps the most vocal heretic in the decade preceding the depression was Mr. Waddill Catchings. It was a businessman who set J. A. Hobson on the path of heresy. Then, too, there is the case of Silvio Gesell. Professor Gordon Hayes has recently reminded us of the Boston attorney, Uriel H. Crocker, who published a little book in 1884 entitled, *Excessive Saving a Cause of Commercial Distress*.[1] There is even something very suggestive in the "fear of goods" from which, as Professor Heckscher shows, the mercantilists suffered, with its accompanying belief "that unemployment was an effect of the surplus of goods" and eagerness for a perennial excess of exports over imports as a means of avoiding the dire threat of abundance, all of which "went back at least to the middle of the sixteenth century, and, from its beginning was connected with the need for employment."[2] This record, I believe, could be made continuous, and what it would show is that every now

[1] *Spending, Saving, and Employment* (New York, 1945), pp. 148–152.
[2] *Mercantilism*, Vol. II, pp. 121, 122.

and again businessmen have responded to realities of the economic process.

But isolated observations and fragmentary insights have not led to a general theory precisely because they were fragmentary and isolated. In this connection I am reminded of the anomaly of Hobson and Veblen. The inability of these two social philosophers to understand each other has puzzled me for years. For not only were their ideas mutually complementary; if they could have been put together they would have anticipated the thinking of the thirties and even, I think, have gone beyond our present position. But Hobson was completely impervious to Veblen's principal idea. Even after his adoption of Mummery's underconsumption heresy, he could still assimilate Sombart's essentially pecuniary theory of the evolution of capitalism, and this interposed a fatal barrier between his conception of the flow of income and Veblen's conception of economic progress which, as I shall try to show, might have been the foundation of a general theory of income and economic progress. Veblen likewise suffered from a fatal astigmatism. He failed to see the significance of underconsumption. One of his earliest essays was a reply to Professor Hayes's friend, Uriel Crocker. It was a highly instructive failure, and I shall therefore come back to it later on. But at the moment my only point is the impossibility of accounting for the intellectual revolution of the thirties in terms of any particular incident, financial or intellectual. Recent developments have vindicated J. A. Hobson and his fellow heretics, but the present revolution is not their doing. The coincidence of the new era of economic theorizing with the great depression is too striking to be set aside, but no clear connection can be traced between any particular economic reality and the general theory which has been emerging at this time.

Apparently something had already happened to the economic thinking of our generation before 1930—something less obvious than open criticism of previously accepted dogma or open acceptance of long-familiar heresy, but something pervasive enough to render a great many professional economists and a large part of the literate public susceptible to the promptings of events which would otherwise have had no effect on economic thinking. This ripening, whatever it was, must have been largely unperceived; otherwise we should now be in no doubt of its identity. It must also have been very general; otherwise it could have had no such general effect. At the same time it must have borne directly on just such events as those the thirties ushered in. Otherwise how could those events have impacted on our economic thinking as they unquestionably did?

This can only mean that some very general and considerable change

was going on for some time prior to 1929 in the region of the basic preconceptions upon which all economic thinking rests, or even in the region of the social attitudes and apprehensions of which such postulates are the rationalization. That is, it must have transpired somewhere below the level of abstraction on which for the most part economic analysis now takes place. The problem is how to penetrate to this subliminal region. In the effort to do so, and at the risk of seeming to recapitulate the obvious, but fortified by Professor Hayek's recent example, I shall therefore ask, as he does: What is our basic problem? What are the issues to the resolution of which all economic analysis is addressed? In his recent article Professor Hayek gives the following answer: the problem, he says, is that of "how to secure the best use of resources known to any members of society, for ends whose relative importance only these individuals know."[3] This is, of course, a clear and succinct statement of a proposition which enjoys wide currency at the present time. As such it seems to me to be a highly sophisticated expression of current habits of thought. Surely its essentially static character, which seems almost to imply the qualifying phrase, "at any given moment," can only be a projection of the equilibrium analysis which has resulted from the efforts of several generations of economists to understand and demonstrate the functions performed by the price system, with which, indeed, Professor Hayek is explicitly concerned, in this article. But wherever it may end, surely economic thinking does not begin with price equilibrium. Surely it begins with matters that were insistently present to the naïve apprehensions of men who had not yet begun to think in terms of the allocation of scarce resources.

It seems to me that two such matters were so present, and I am interested to find both clearly stated in a recent article by Professor von Mises. One is the matter of economic growth. When Professor von Mises says, as he does in his recent address to the American Academy of Political and Social Science, that "the only means to increase a nation's welfare is to increase and to improve the output of products,"[4] he has stated a proposition with which I should expect every economist to agree. In contrast to Professor Hayek's dictum, this proposition is virtually timeless. It might have been quoted from the literature of a century ago, or two centuries ago, or even three or four. Even when a nation's economic welfare was identified with its stock of precious metal, the means of increasing that stock was understood to be the increase and improvement of its output of products.

To be sure, awareness of and concern about economic growth do distinguish modern from medieval society. Therein lies the importance of

[3] "The Use of Knowledge in Society," *American Economic Review*, Sept., 1945, p. 520.
[4] *Vital Speeches*, May 1, 1945, p. 442.

economic growth. Surely it is one of the two basic facts that gave rise to economic inquiry at the very dawn of modern times and still condition it today. The other, I think, is the fact of economic inequality. When Professor von Mises says, as he does in the sentence preceding the one I have just quoted, "all that good government can do to improve the material well-being of the masses is to establish and to preserve an institutional setting in which there are no obstacles to the progressive accumulation of new capital and its utilization for the improvement of technical methods of production," some of his phrases rattle the bones of controversy. But if he were to state the issue as one of an institutional setting that imposes no obstacles to the growth of industrial plant and the improvement of technical methods of production, all would agree. The questions are: What institutional setting does this? Does that of capitalism do so, or does it do precisely the reverse?

In stating the problem in this way Professor von Mises seems to be in exact agreement with J. M. Keynes. For both, the central problem of economics is that of the relation between economic inequality and economic growth. This is the issue with respect to which the old way of thinking and the new reach precisely opposite conclusions. Professor von Mises has stated one of these very clearly and succinctly in the following sentences: "The inherent tendency of capitalist evolution is to raise real wage rates steadily. This outcome is the effect of the progressive accumulation of capital by means of which technological methods of production are improved. Whenever the accumulation of additional capital stops, it comes to a standstill."[5] This is the position which J. M. Keynes identified in the second paragraph of the concluding chapter of *The General Theory* as "the belief that the growth of capital depends upon the strength of the motive towards individual saving and that for a large proportion of this growth we are dependent on the savings of the rich out of their superfluity." Keynes' own position is of course the opposite of this, and is stated on the following page in these sentences: "Thus our argument leads toward the conclusion that in contemporary conditions the growth of wealth, so far from being dependent on the abstinence of the rich, as is commonly supposed, is more likely to be impeded by it. One of the chief social justifications of great inequality of wealth is, therefore, removed."

The field of argument by which these two positions are divided is of course that of the income pattern. That is, both ways of thinking regard the flow of income as the causal link between the social structure and the process of economic growth. According to both, this process may be impeded or accelerated by the occurrence or removal of constrictions in

[5] *Loc. cit.*, p. 443.

the flow of income. They differ most specifically with regard to the location of the critical point. According to one, the point at which the flow of income is most liable to be deficient is that of saving, or capital accumulation. According to the other, it is that of outlay, or offsets to saving, with some difference of emphasis on investment and consumption. Obviously this emphasis is what has led to the identification of the latter point of view by such tags as those of "oversaving" and "underconsumption," and to the now universal adoption of the Marxist tag of "capitalism," at least in common usage, to identify the former.

In their attempts to resolve this controversy by establishing what actually happens to the flow of income, economists have lately engaged in microscopic analysis of the details of saving, investment, and consumer spending. But the belief in the dependence of economic growth upon the accumulation of funds did not originate in any such analysis. It did not even originate in a theory of saving and investment. On various occasions J. M. Keynes has referred to what he regards as an implicit belief on the part of classical economists generally that aggregate savings and aggregate investment are necessarily equal. Considering this idea within the frame of reference of the income pattern he has attributed it to the presumption that "every act of increased saving by an individual necessarily brings into existence a corresponding act of increased investment."[6] But the virtual identity of saving and investment was not a scientific discovery at which economists arrived in consequence of detailed analysis. It was, as J. M. Keynes has said, a belief, implicit in subsequent analysis in the quite literal sense of a prior conviction to which subsequent analysis as a whole gave intellectual expression.

That prior conviction preceded and conditioned the concept of capital itself. How this happened is suggested in a very remarkable article, written only a short time before his death, by Professor Edwin Cannan. He began by pointing out that the concept of capital gives expression to the attitude of individualism which has underlaid the commercial culture and conditioned it at every point. In effect he attributed the traditional doctrine of capital to a confusion of the personal with the impersonal aspects of economic process by what Professor Whitehead might have called the fallacy of misplaced generality: "Thus in regard to capital and the heritage of improvement, the economists worked outwards from the individual to the nation and society, rather losing interest as they went, without testing results by working backwards from society to the individual, and the consequence has been that capital, unduly glorified, has been allowed to usurp the place which should properly be occupied by the heritage of improvement, to the great detri-

[6] *General Theory*, p. 178.

ment both of economic theory and of public policy."[7] Since this confusion still persists, Professor Cannan's scolding is deserved. But he must be presumed to have known that it did not originate with the present generation and that this makes a great deal of difference. Obviously the conclusion reached by any such transformation of particulars to universals must be greatly affected by what the particular is that is so transformed; and equally obviously the particulars of five centuries ago were significantly different from those of the present day.

We have only to imagine this error as being made at the present time to see how different the case would be. What appears at the individual level in this case is now clearly seen to be the exercise of authority. In the institutional setting of capitalism the "activation" of any given enterprise depends upon command of capital funds; and since this is so, the procurement of funds is the critical necessity for all individual businessmen and firms, everywhere and always. Obviously the possibility of an enterprise being undertaken also depends upon scientific knowledge, the state of the industrial arts, and the pre-existence of industrial plant capable of sustaining such an enterprise. But it is evident to all beholders today that this is dependence of quite another sort. The individual enterpriser who is seeking the funds necessary to float his project has already taken account of the physical possibility of the proposed enterprise and therefore of the technological circumstances which make it physically possible. No one could be so misguided today as to suppose that what makes an enterprise physically possible is the extension of funds. Under the institutions of capitalism the provision of funds, on specified conditions and at specified rates, makes the enterprise possible in a sense that would now be clearly recognized as political; that is, it is an extension of authority to proceed.

This is what would be universalized if economic reasoning were to generalize from the individual case as it is understood today. The aggregate of funds available for investment would be clearly distinguished from the advancement of science, the state of the industrial arts, and even from the totality of existing industry which previous investment might be presumed to have made possible. The political, that is to say authoritarian, character of funds would be no less apparent in the aggregate than in the particular case.

Under these circumstances it seems very unlikely that invested funds would ever have been identified with the physical instruments of production or that interest on invested funds would have been identified with the so-called "earnings" of those physical instruments. The cost of obtaining official consent to conduct an enterprise might perhaps be reckoned as one of the costs of the enterprise, much as taxes have come

[7] "Capital and the Heritage of Improvement," *Economica*, Nov., 1934, p. 381.

to be so reckoned. But nobody, not even Professor von Mises, now suggests that a benign government is a factor of production or that the expenses of the benign sovereign are one of the economic costs of production, in amounts that might perhaps be measured in units of marginal benignity. The power represented by the aggregate of funds differs only in being an aggregate.

All this would be quite evident today in the absence of previous theoretical commitments. In particular it would be obvious that the aggregate of economic power, like the aggregate of all power, is of indefinite magnitude. Consequently the belief to which J. M. Keynes refers could never have arisen under present circumstances. The funds from which that aggregate is formed derive in part from savings; but they also derive from a variety of other circumstances, and their value both as a source of income and as an instrument of power impels their accumulation in amounts that have no direct relation to the volume of real investment, present or expected. It would be utterly fantastic to suppose, under the circumstances known to us today, that every act of increased saving by an individual necessarily brings into existence a corresponding act of increased investment.

This can only mean that present-day theoretical difficulties such as those underlying the Keynesian revolution owe their origin to the circumstances of another day. It is not my business in this paper to try to resolve a major theoretical confusion, nor to try to trace its sources. But it is necessary to try to see the nature of the problem and to identify the process of its development, since that process must have conditioned the impact of the recent depression, which therefore cannot otherwise be understood. To my mind the explanation of the impact of the depression upon current economic thinking lies in the very great difference between present-day circumstances and those of five centuries ago, and also in the very considerable change our economic thinking had already undergone before the onset of the depression.

As Professor Cannan would surely have agreed, the individual case which was projected to the societal level so as to affect the traditional conception of capital was very different from the sort of thing we know today. That conception was fully formed long before the emergence of classical theory as a coherent body of ideas, and what it embodied was the pattern of business activity at the dawn of modern times. At that time no clear distinction was drawn between savers and investors because such a distinction scarcely existed in fact. The accumulator of capital funds was himself the investor and the active participant in the enterprise which his grant made possible; and since accumulation occurred very largely if not altogether in the form of a physical accumulation of bullion, not only were capital funds confused with capital equip-

ment, real wealth was confused with money. Indeed, these circumstances suggest strongly that our present-day confusion of saving and investment is in literal truth an echo of the most egregious error of the mercantilists.

But this is not the whole story. Along with these positively conditioning circumstances there went a still more general deficiency. Even if individual experience still failed to suggest a distinction between grants of funds and other factors of production, it is unlikely that present-day thinking would tolerate a theory of economic development along pecuniary lines. What makes it impossible is our present general awareness of the identity of industrial progress with what Professor Cannan called "the heritage of improvement." As he used it this phrase refers to the state of the industrial arts and behind that the whole process of development of science and technology, including all the techniques of organization, especially those of communication and transport, and the whole array of physical appurtenances in which the past development of science and technology find embodiment and by virtue of which the present world differs from that of our remote ancestors who, in Professor Cannan's words, "regarded Wookey Hole as a delectable habitation."

In the past, capital funds were identified with their supposed embodiment in the physical properties employed in the production of wealth only because no social process such as that of the heritage of improvement was then understood. Nobody ever questioned the ability of society to make constructive use of all the funds which thrift, prudence, abstinence, and a highly inequitable distribution of income might provide, since nobody made any distinction between the exercise of power and any other kind of causation. Such a conception of economic process was not only possible but inevitable for a community which held the patron in higher esteem than the artist, one which viewed the scientific discoveries of the time almost exclusively in the setting of theology with virtually no general awareness of their industrial importance, one which paid so little attention to the industrial advances of the time that historians now have the greatest difficulty in tracing them. To the reflective mind of the sixteenth, seventeenth, and even eighteenth centuries the commercial aspect of the modern economy was paramount. Merchants were fast supplanting feudal lords as the power behind the throne. At the same time economic development was sufficiently rapid to be generally and progressively apparent. What could be more natural under these circumstances—when the progress of opulence was the subject of increasingly general discussion—than for the whole development to be conceived as a commercial phenomenon, dominated by merchants, conditioned by the width of the market, and "made

possible" by the sum of the accumulations of liquid wealth, command of which in any individual case did indeed make it possible for a particular merchant to engage in trade?

Once the heritage of improvement had been clearly identified as such, the case was completely altered. By 1934 it was possible and, I think, inevitable that we should take quite a different view of the whole process of economic growth, and should therefore deplore the traditional view as a mischievous error. Such, at all events, was the spirit in which Professor Cannan declared in the same article from which I have already quoted: " . . . immense mischief has resulted from the fact that by their failure to insist on the difference between the aggregate of capital and the whole economic heritage combined with their somewhat excessive glorification of capital, the eighteenth century and nineteenth century economists gave rise to a widespread impression that the capital of society is much the same thing as the whole heritage, so that alterations in its magnitude must be regarded with the same favour and disfavour as increases and decreases of the whole heritage."[8] So far as I know, this rebuke has been accepted without protest. Indeed, Professor Cannan wrote, somewhat apologetically, that "a very short time ago these remarks would have seemed to me to be trite and unnecessary." Nevertheless he made no reference to any earlier exponent of this significant distinction, not even to Veblen whose articles "On the Nature of Capital," first published in 1908 and reprinted in *The Place of Science in Modern Civilization and Other Essays* in 1919, were explicitly addressed to this very point. The truth is, I think, that understanding of the heritage of improvement is not a specifically economic achievement which later economists receive from earlier economists. It is rather a corollary of the comparative study of societies and cultures. That is the source from which Veblen drew his insight into the process of economic development, and the same was probably true of Edwin Cannan. What he called "the heritage of improvement" is virtually identical with what anthropologists call "the material culture." Economic change is an aspect of social change, and our understanding of it is bound to be affected by a broader understanding of the larger process, just as the whole conception of social process was affected by Darwinian evolution and by modern scientific developments generally.

This process of intellectual reorientation has been as gradual as it is pervasive. That is why the impact of the Great Depression was so sudden and so marked. After all, the incidence of the evolutionary way of thinking was not upon the rubrics and formulas of price analysis with which economists have chiefly concerned themselves but rather upon

[8] *Loc. cit.*, p. 389.

the underlying preconceptions or beliefs which economists share with the community at large. These do not appear overtly in the formulas; and consequently it has been possible for economists to concede substantial changes in the larger area of social process while ruling such matters out of their professional consideration as lying outside the field of economics.

Even so, the climatological change has been considerable. One evidence of it is the insistence—quite general for something like half a century—upon a clear distinction between dynamic and so-called "stationary" situations, and the general recognition of the importance of what even Professor von Mises calls "technological methods of production" in the dynamic situation. There has even been some disposition, of which Professor Schumpeter's work is perhaps the most notable example, to credit business enterprise not merely with the progress of opulence in the traditional manner but with the heritage of technological improvement. Still more important, I believe, is the recent tendency to rest the case of economic orthodoxy on the administrative indispensability of the price system. This shift of ground is more significant than has yet been generally appreciated. To say that we must entrust the conduct of our affairs to the operation of the market, cheerfully accepting whatever anomalies of wealth and poverty may then ensue, because no other social instrumentality is equal to the task of allocating resources, etc., etc., is a very different matter from saying, as we have traditionally done, that society should be positively grateful to the rich for having such large incomes and for using them to make possible the enterprises upon which all others depend for their employment. The administrative indispensability argument, I submit, is incomparably the weaker of the two and would never have gained currency except in tacit recognition of the growing incredibility of the stronger case. The same is true in even greater degree of the bogy of totalitarianism. To represent the police-state as the only alternative to classical laissez faire is virtually to admit that traditional commercialism can no longer be loved for its own sake.

Such changes are very significant, but they are changes only of atmosphere. In the passage I have quoted from the last chapter of *The General Theory* the author speaks of his argument having led to the conclusions he then states. As I have tried to suggest, it was the whole drift of modern thought which had been leading us towards such conclusions. But this was not apparent. So long as nothing happened to call in question the traditional belief that economic development depends upon the savings of the rich out of their superfluity, it was not apparent that such a belief is contingent upon economic development being conceived in wholly pecuniary terms and consequently that it

loses force in direct proportion to the extent to which economic development is conceived in terms of the heritage of improvement.

But the depression made this clear. That, I think, is the explanation of its extraordinary impact upon economic thinking. By 1929 the whole community had become machine-conscious to an unprecedented degree. Consequently the depression figured in the imagination of the community at large and also in the researches of economists as an affair of idle machines and mass unemployment, drastically reduced industrial production and vast accumulations of farm products. So conceived, this situation revealed with dramatic suddenness the complete implausibility of the reasoning which attributed such a situation to a deficiency of abstinence and thrift. The time had therefore come for a revolution in reasoning. The traditional analysis was ancillary in the first place to a previously established conviction that the progress of opulence was contingent upon the accumulation of capital funds by virtue of extreme inequalities of income; and present-day analysis is likewise ancillary to the reversal of conviction which was the general and immediate consequence of the impact of the depression upon a technologically conditioned world. All the various theoretical efforts of what Beveridge calls "the new era" have the common purpose of ascertaining exactly how the growth of the heritage of improvement is impeded by a feudally-conditioned propensity to consume.

Considerations of space and time forbid even the briefest review of these theoretical efforts, but in closing perhaps I may venture an opinion. It is my opinion that the Keynesian revolution is more revolutionary than most of its participants yet realize. In the first place, the differentiation of the heritage of improvement from the accumulation of funds will oblige us to carry the renovation of our thinking about capital much farther than it has gone as yet. Thus J. M. Keynes has spoken in various places[9] of "increasing the stock of capital until it ceases to be scarce," and this eventuality has been the subject of general discussion. Indeed, although Keynes made no mention of Professor Cannan in this connection, the very remarkable article of which I have been making so much use contains the following sentence: "If we could improve our knowledge and organization in such a way as to wipe out the value of all the things which now form our real capital, how happy we should be!"[10] Both of these statements seem quite clearly to refer to industrial plant and materials. But the problem they pose can be relevant only to funds. To see this we have only to think of a completely new industry, such as the use of atomic power may some day bring.

[9] E.g., *The General Theory*, p. 325.
[10] *Loc. cit.*, p. 392.

What procedures could society now employ to insure a profusion of equipment and materials for producing atomic power? Obviously no one knows. We could easily provide against lack of funds being an obstacle to such a development. Indeed, that is what we did in the development of atomic energy for military purposes. We can and eventually will purge ourselves completely of the idea that the (wholly supposititious) aggregate of funds is a limiting factor in the process of industrial growth and will therefore conceive and treat ordinary peacetime growth as we already conceive and treat the prosecution of war. To do so is indeed implicit in the Keynesian position. But it means completely disentangling our thinking about funds from our thinking about the industrial process.

The logical consequences of this resolution are indeed momentous, more so than most contributors to it have yet seen—or said. To be sure, J. M. Keynes has boldly faced the possibility of the disappearance of the rentier. But he derives this eventuality from his theory of the progressive decline of the marginal efficiency of capital. This is quite sufficiently disturbing. But the complete dissociation of the institutional pattern by virtue of which capital funds are accumulated from the technological process by virtue of which capital equipment proliferates—a dissociation toward which, I believe, we are being carried by the logic underlying the whole Keynesian movement—means the nullification of the idea by which alone the institutional framework of capitalism is supported.

The intellectual consequences of the Keynesian denial of the supposedly natural sequence of saving and investment are therefore more revolutionary than those of Marxism. After all, there is nothing particularly revolutionary in the intellectual sense about rebellion. Throughout the ages rebels have always sought to remedy their wrongs by liquidating their masters, on the presumption that whatever is wrong will surely be righted if the liquidation is sufficiently drastic. As Veblen saw, the Marxian dialectic does no more than dress up the perennial exasperation of the disinherited.

Strangely enough, Veblen's own exasperation nevertheless found the same outlet. I have already mentioned the anomaly of his failure to connect with Hobson, whose proposals for socializing demand—Veblen also cites an essay by Smart with the title, "The Socializing of Consumption"—he dismissed as "palliatives" in a footnote in *The Theory of Business Enterprise.*[11] To be sure, Hobson put Veblen off by his failure to understand the process of industrial growth, in consequence of which, as I have noted, his underconsumptionism was a structure without foundation. Consequently Veblen failed to realize that modifying the

[11] *Op. cit.*, p. 257.

flow of income so as to achieve an institutional setting in which there are no obstacles to the full utilization of the heritage of improvement is directly in line with his own conception of the impersonal process of industrial growth. Indeed he virtually contradicted himself in the same footnote in which he stigmatized the socialization of demand as a "palliative" by going on to declare that it is also "manifestly chimerical in any community . . . where public policy is . . . guided by business interests with a naïve view to an increase of profits."

The great weakness of all palliatives is contained in the definition of the word—they mitigate evils without removing them—and the great weakness of violent rebellion, as Veblen seemed elsewhere to realize better than anyone else of his generation, is the failure of understanding which makes truly remedial action impossible and rebellion therefore a counsel of despair. Truly remedial action flows only from understanding such as that toward which we now seem to be finding our way. Implicit in the Keynesian revolution is the conviction, stated by J. M. Keynes himself in the closing paragraph of *The General Theory*, that "the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas." According to this way of thinking, the real obstacle to the achievement of an institutional setting consonant with full production has been the general belief that such an institutional setting already existed. Rejection of that belief does not necessarily mean the immediate and total collapse of the present institutional structure, much of which is very well worth saving for quite different reasons. But it does mean the opening of the way to whatever institutional adjustments may be necessary in order to remove the obstacles to the full utilization of our heritage of improvement. In this sense the present intellectual revolution is more revolutionary than any protest against injustice or against the violation of the supposed rights of the protesting party.

The effectiveness of this intellectual challenge owes much to the cogent reasoning of the movement's leaders. It also owes much to the impact of the depression. But no less important is the susceptibility of the present generation's thinking to such an impact. Insofar as our generation has been susceptible to such influences and ready for such intellectual leadership, that is because over a period of several generations the community has gradually learned to understand the progress of opulence and the heritage of improvement.

THE IMPACT OF TOTAL WAR

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In the last few years most economists have probably been questioned many times concerning the effects of war, or the return from war to peace, on the principles of economics. Individuals who are untrained in economics or who are only slightly acquainted with the subject have commonly assumed that the operation of economic principles must have been almost entirely suspended during the second World War, and that conditions which would follow the end of the war would require extensive revision of these principles. It is also commonly assumed that the economic problems which we encounter during or at the end of a major war are not at all like those which exist at other times, but rather are altogether strange and new. These attitudes are largely unfounded.

Since they involve no assumptions concerning institutional conditions in the economy or the presence or absence of governmental controls, many economic principles are as valid under wartime conditions as at any other time. Consider, for example, the law of diminishing productivity, which indicates that the various productive agents are imperfect substitutes for each other. Under given methods of production, if equal successive units of some one productive agent of given quality are used in conjunction with fixed amounts of other productive agents, the average product per unit of the variable agent, after a certain point has been reached, will decline. This proposition is valid whether the productive agents are privately owned or publicly owned, whether the control of production rests in the hands of private individuals or governmental agencies, whether those in control of production are motivated by the desire for profits or by other considerations, and whether the organization of production is competitive or monopolistic. There is, therefore, nothing about wartime conditions which can affect the operation of this law.

Other economic principles which are not likely to be affected by wartime conditions include principles of specialization and roundabout production—principles concerning productive results in relation to scale of plant (which depend upon the indivisibility of productive agents or services), the principle of opportunity costs, the principle of diminishing utility, and the law of demand. While the general levels of cost may change considerably in wartime, the nature and behavior of various types of cost faced by the individual firm may be expected to be the same as usual, and the firm is unlikely to be willing, if left to its own devices, to expand output beyond the point at which marginal revenue promises to be equal to marginal cost.

Economic principles which may be held in suspension to some extent in wartime are those which depend for their validity upon the untrammeled operation of capitalistic institutions. Consider, for example, the law of long-run competitive price, which holds that the price of an economic good, in the long run under competition, tends to equal cost of production per unit for all firms in the industry. Under private property, freedom of enterprise, economic motivation, competition, and the absence of governmental controls, the existence of a price for a good well above the level of minimum long-run average cost for the firms already in an industry would be expected to lead to the entrance of new firms and productive agents into the industry, an increase in the productive capacity and output of the industry, and a fall in the price of the product to the level of cost of production.

Under wartime conditions, the price of an economic good may rest at a profitable level over a considerable period of time in an erstwhile competitive industry and yet no increase whatever in the size, productive capacity, and output of the industry may occur. That is, the government may be unwilling to have the industry expand, and its restrictions on the use of materials, manpower, and equipment may make it impossible for new firms to acquire the productive agents necessary for entrance into the industry. Indeed, although the prices of certain products, such as alcoholic beverages or bicycles, may be such as would allow the firms in the industries to operate at full capacity and make plenty of money, in wartime the government may require the firms to curtail production severely, or even stop it altogether from time to time, in order that their productive facilities may be used to turn out products which are more essential for the prosecution of the war. In other industries, firms may be relieved entirely of their usual worries concerning the market prices of their products, for the government may agree to buy given quantities of product, or even all they can produce, at a price equal to cost plus a certain percentage or sum of return for the firms. Thus certain industries may operate at full capacity or even undergo expansion in wartime, even though no such developments would have occurred under ordinary conditions.

In roughly similar fashion, the operation of any economic principle, which indicates how the money income of society will be distributed among the owners of the various productive agents under competitive conditions and in the absence of governmental interference, is likely to be at least partly suspended in a wartime situation in which the government fixes the prices of the products of these agents and also directly controls wage rates, interest rates, and rents. The trouble in all such cases is not that the economic principles are invalid under the conditions which they assume, but rather that these assumed conditions are not

likely to prevail in practice in wartime. However, the number of such principles is not very large, and we may conclude that, on the whole, the reports concerning the destructive impact of war on the principles of economics have been greatly exaggerated.

There is no doubt that total war brings us face to face with a host of economic problems, but it is a mistake to think that these problems are entirely strange and new. For example, we should not think that the conversion and extension of productive facilities are processes which go on only in wartime. In peacetime, too, it is frequently necessary for some industries to expand their productive facilities, while others contract theirs, and for productive facilities to be converted from one field of production to another. In a capitalistic economy such extension (or contraction) and conversion of productive facilities occur on the basis of price relationships for the most part, by means of a process too familiar to require discussion here.

In wartime the government is likely to resort to direct control over production and over the extension and conversion of productive facilities. The reason is not that the problems in question are unusual in *nature*, but rather that they are unusual in *scope* and *urgency*. In peacetime the conversion and extension of productive facilities occur gradually and only a small number of industries may be seriously affected at any one time. In wartime, the conversion and extension of productive facilities are needed "right now" and most, if not all, industries are affected to some extent. Moreover, if the banks are creating deposits to supply a considerable part of the funds necessary to finance governmental war expenditures, reliance on price relationships to induce the extension and conversion of productive facilities may be ineffective and costly. That is, if the government spends much more for war than it takes out of the current incomes of the citizens through taxes and direct sales of bonds, the willingness and ability of the government to pay high prices for, say, airplanes may be offset to a considerable extent by the willingness and ability of private citizens to pay high prices for automobiles. In such a case, the extension and conversion of productive facilities may not go forward as desired, and the money cost of the war may be increased greatly as prices rise because of the competitive bidding of government and citizens for war goods and civilian goods, respectively.

Problems of getting a total labor force of appropriate size, of allocating the labor force among industries and businesses, and of maximizing the productivity of labor are always with us in peace or in war. Quantities of finished commodities and services are never adequate to satisfy the wants of all consumers, and some form of rationing or apportionment, whether through price changes or the allocation of specific physical quantities, is always necessary. Problems of industrial conflict,

inflation, taxation, deficit financing, and the public debt are by no means peculiar to wartime. However, these various problems, like those of the conversion and extension of productive facilities, may be of unusually great magnitude and urgency in wartime, and we are more likely in wartime than in peacetime to rely upon direct governmental controls for the solution of economic problems. Certainly the degree of governmental control over economic life which was achieved during the second World War entirely dwarfed anything which had ever existed before in this country. Whether all the controls actually employed were necessary for the successful prosecution of the war, and whether they were well or poorly suited to the tasks which had to be performed, need not concern us here. Neither will it be profitable for us to argue about the exact type of controlled economy which we had during the war. The fact to be emphasized is that for several years we have been living in a controlled and planned economy.

While there was much writing about the economic controls already in effect, the thinking of economists during the war came to be concentrated to a considerable extent on longer-range problems which are of concern from the points of view of both theory and practical policy—full employment, economic security, wage policy, the burden of the public debt, and other matters. These matters in turn seem to converge on the important theoretical and practical issue of capitalism versus collectivism. Will our economy in the postwar period be a relatively free system of the capitalistic type or will it be a planned economy of socialism or fascism?

At present it seems not at all unlikely that we shall find ourselves living in a planned and controlled economy long after the war has been officially declared to be at an end. To be sure, not many people are advocating a controlled economy as such. Instead we are asked to approve such attractive and innocent-sounding things as full employment guaranteed or underwritten by the government; a system of social security, popularly known as the "cradle-to-the-grave" variety, which will cover many more people, provide against more risks, and furnish much larger benefits than the present system; and higher minimum wages, a national minimum per capita income, and a high wage policy in general, in order to maintain purchasing power and aggregate demand. The advocates of such policies contend that they are necessary to the continued existence and successful functioning of the capitalistic or free enterprise system in this country. I claim that they are more likely to result in the destruction of this system and to ensure the future existence of a controlled and planned economy.

If many of the policies now recommended should be adopted, what would the annual expenditures of the federal government amount to in the postwar period? Interest at 2 per cent on a national debt of 300

billion dollars would amount to 6 billion dollars per year, or an amount about twice as great as total federal expenditures in 1930. If any serious attempt were made to pay off the debt gradually, further large expenditures would be necessary. If the debt were not to be reduced in this fashion, it would have to be refinanced and probably at higher rates of interest, which would have much the same effect on federal expenditures. Some people who are not much concerned about the size of the national debt assume that there is a virtually limitless market for government bonds in this country at an interest rate of about 2 per cent, but I doubt very much if this would be true in peacetime and in a free market.

According to most pronouncements on the subject, our military and naval establishments and the armed forces in general will have to be maintained at a high level for some years to come, in order that we may protect ourselves from unknown or unmentionable dangers and may be able to play our part in international organizations for keeping the peace. The cost will certainly run into several billions of dollars annually. We shall have other large expenditures for pensions, hospitalization, medical care, education, training, rehabilitation, and other projects undertaken for the benefit of veterans of the second World War. Then we must add some billions of dollars for the operation of ordinary departments of the government, other billions for the maintenance of a complete system of social security for all or most people, and possibly still other billions for providing full employment if this blessed condition does not result naturally.

Just how large annual federal expenditures would be on this basis is anybody's guess, but all the estimates or theoretical models that I have seen call for federal expenditures which are far larger than those to which we have been accustomed in peacetime. Some people are thinking in terms of only 18 or 20 billion dollars per year. Others see a possibility that federal expenditures may run to 35 or 40 billions annually, and the actual preliminary budget for the fiscal year 1947 calls for expenditures of about 36 billion dollars. If we did not wish to add steadily to the already overgrown federal debt, those expenditures would have to be made out of tax revenue. This would call for a continuation of very high levels of taxation, and probably of levels not far removed from those which prevailed during the war.

The point in all this is that our economic system probably could not operate in capitalistic fashion in peacetime if the government found it necessary to take a very large part of the earnings of business enterprises through taxation while leaving these same enterprises to bear almost unassisted any losses which they might encounter. And certainly such a situation would be most unfavorable for the expansion of the economy and the foundation of new enterprises on the basis of private capital. Various reforms of the federal tax system, which would make

taxation bear less heavily than at present on the incomes which individuals and firms derive from employment-creating activities, might go far toward making heavy taxation, if not compatible, at least less inconsistent with the maintenance of a high level of employment and production in the private sector of the economy. The view that Congress is sure to enact such reforms, however, merely because they would be desirable, seems very optimistic.

Further reason for concern may be found in present-day proposals and demands in connection with wages. It is proposed, for example, that a national minimum wage high enough to furnish a decent scale of living should be provided for all workers employed by enterprises which are actually in interstate commerce or which may find themselves unexpectedly in interstate commerce by virtue of Supreme Court decisions. The proposal for a national minimum per capita income seems even more comprehensive. And, of course, the demands of many unions for an increase of about 30 per cent in basic wage rates, often coupled with an insistence that the prices of the products sold by the enterprises should not be raised, are only too well known.

Wage policy in the postwar period is an immensely complicated subject, but a few observations at this point may be in order. While it may be considered neither fair nor economically feasible to credit labor with all increases that occur in productivity in the various fields of production and to pass on all these gains to the workers in the form of higher wages, there is quite general agreement that wages should be advanced as productivity increases in the economy as a whole. This proposition, however, refers to the general level of wages and not merely to wages in the specific industries and businesses in which the efficiency of production increases. It is rather difficult to determine just what kind of wage increases would be justified immediately on the basis of increases in productivity which have occurred during the war period, but one report has it that the median increase in output per man-hour between 1939 and 1944 was only 5.2 per cent in 23 industries which were making substantially the same products at the end of this period as at the beginning.[1] Excessive increases in wages, which place wages at a level above the value of the work performed, are very likely to operate as a direct obstacle to employment and will add to the inflationary pressure to which we are already exposed.

The wage demands and proposals which are being made at present seem to have little relation to labor productivity. Rather they seem to reflect the notion of some governmental leaders that a combination of high wages and high taxes must be employed to make sure that firms have only small earnings, lest they be tempted to the ignoble and anti-

[1] U. S. Bureau of Labor Statistics, *Productivity and Unit Labor Costs in Selected Manufacturing Industries, 1939–43*, L. S. 45-3208, May, 1945.

social feat of saving part of their earnings. However, individuals have little incentive to operate existing enterprises and even less to found new ones if almost the entire money income of enterprises, over and above the other money expenses of production, must be divided between the workers and the government, leaving little if any income for the owners of the firms. If private enterprisers have no incentive to operate the industries and businesses of the country, it does not require occult powers to decide who will step in and operate them. It seems foolish to set up conditions under which a capitalistic system cannot operate and then decide to have the government take over because the system does not operate well.

Full employment is rapidly becoming a social objective which everyone must favor or run the risk of being regarded as unsocial. However, the advocates of full-employment policy seem to disagree considerably as to what the term means. It is sometimes used to refer to a situation in which everyone who is able and willing to work will be able to find employment. In other cases it means a situation in which there will be more job-vacancies than applicants, although some individuals will be out of work at any given time, or even a situation in which unemployment is merely held down to an irreducible core, consisting of one to three million persons according to some estimates, or five or six millions according to others.

The meaning which is assigned to the objective of full employment will depend to some extent upon whether we think of it as a conditional or as an unconditional objective. If it is a conditional objective, then presumably we want as much of it as we can get without sacrificing other objectives which we also regard as important, such as individual economic and political freedom, a high rate of progress for the economic system, or a satisfactory level of real income. On the other hand, if full employment is an unconditional objective, then we want it even though, in order to get it, we have to give up our economic and political freedom, get along with an unprogressive economy, or sacrifice some of the real income which we could otherwise obtain.

As a conditional objective, it might be well to define full employment as the highest level of employment which can be attained without direct governmental control over the economic system. Such a definition, however, would not be acceptable to many of the wilder advocates of full employment policy, who seem to think that, if the thermometer indicates that the temperature in the house is too low for comfort, we should not hesitate to apply the governmental torch to the thermometer, regardless of consequences, in an effort to secure a more satisfactory reading. That is, even though chronic unemployment is merely a symptom of certain fundamental disorders which exist in the economy, they think we should go directly to work on the matter of unemployment itself.

We should be greatly concerned about the effects which the pursuit of full employment, as an unconditional objective, might have on the nature of our economic system. In the first place, would it be possible for the government to make heavy expenditures in the process of creating employment without encroaching on the fields which are traditionally reserved for private enterprise? Some advocates of the policy apparently have no worries on this score. The necessary governmental spending, it is said, would go on in such fields as education, public health facilities, nutrition, slum clearance, and resource development, where the need for public outlay is great quite apart from the question of full employment and where there would be little interference with private enterprise.

The need for expenditures in these fields, however, is not unlimited, and governmental spending for full employment might have to amount to 10 or 15 billions of dollars in some years, or even year after year if, as some people think, there is likely to be a chronic shortage of spending for private investment and consumption. In such a case it would seem that we might have to fall back on the multiplication of post offices and courthouses, if not on leaf raking and hole digging and refilling, if compensatory spending were not to interfere directly with private enterprise. On the other hand, if governmental policy in providing employment did involve direct competition with private enterprise, it might well discourage more employment-creating outlays than it furnished and lead to the gradual replacement of private enterprise by governmental enterprise.

In the second place, disregarding the question of direct competition, would it be possible for the government to make good on an unconditional guarantee of full employment without assuming control over the economic system as a whole? Under such a full employment policy the President, in addition to preparing the regular budget of the federal government, would presumably have to turn out annually another document called a "national budget of production and employment." This budget would estimate the total expenditures by consumers, private enterprisers, and government which would be necessary to assure a full-employment level of production in the ensuing fiscal year, and also the total expenditures by these same persons and agencies which were actually in prospect for the same period. If the latter total were expected to fall short of the former, additional governmental expenditures to raise aggregate demand to the desired level would be recommended.

However, private spending for consumption and the spending of private enterprises for investment are not really given entities to which governmental expenditures for employment creation could simply be added. Suppose, for example, that we are unwilling to increase the public debt any further, that we want the government to derive its funds for

employment creation from taxation, and that large expenditures will be necessary. Heavy taxes, even though levied progressively, will cut into spending for consumption and investment as well as unnecessary saving. Individuals in the higher tax brackets may become less willing to put any capital funds into risky, employment-creating ventures, since any gains which they make will be largely taken by the government, while any losses which they suffer will be almost entirely their own. The necessity of paying heavy taxes on income may also produce distortion in the investment structure, with overinvestment in some industries and businesses and underinvestment in others, which will have unfavorable implications for employment. In view of such considerations, how much additional tax revenue should the government collect and spend in order to provide a given net increase in total employment?

If the governmental guarantee of full employment is to be carried out on the basis of deficit spending rather than taxation, the problem is no less complicated. Heavy deficit spending may affect business confidence and arouse fears of higher taxes later on, with adverse effects on the amount of employment furnished by private industries and businesses. Some prices may be more responsive than others to increases in the total volume of spending, and deficit spending may therefore induce distortions in the general price structure which in turn will influence the volume of private spending and employment. Again, deficit spending on a large scale, besides providing employment, tends to raise the general level of prices, and there is no way to determine accurately in advance how the influence of deficit spending will be divided between furnishing employment and raising prices. It is likely, however, that the latter influence will increase while the former will decrease as the economy gets nearer and nearer to full employment.

Not all unemployment is of the "lack of enterprise" or "shortage of aggregate demand" type which we might hope that deficit spending would relieve. Some unemployment is of a type which has been called "structural" or "market imperfection" unemployment, and results from such things as existing distortions in the price or wage structure, seasonal fluctuations in demand, frictions in the labor market, and abnormally low efficiency, reliability, or adaptability on the part of workers.[2] It is very difficult to determine what part of a given total volume of unemployment is of the structural type at a given time, and deficit spending would be expected to have very little, if any, favorable influence on unemployment of this type. Finally, declines in private spending may be sudden, large, and highly unpredictable, and hence may render any preconceived spending program entirely inadequate.

[2] S. H. Slichter, *Financing American Prosperity* (New York: Twentieth Century Fund, 1945), p. 306.

In the light of such considerations, it would seem very difficult to determine just how much deficit spending should be undertaken at any given time in order to produce a specified net increase in employment. Presumably the deficit spending engaged in by the government in the thirties was intended to induce recovery and achieve a high level of employment, but unemployment continued on a large scale throughout the period. It is easy to look backward and decide that this spending was ineffective because it was carried out on too small a scale, but much more difficult to decide what scale of deficit spending would be adequate to ensure full employment a year or so in advance. High and low points in production and employment in our economy are easy to detect several years after they have occurred. It is quite another problem to determine them as of about the time when they occur, and practically impossible to determine them in advance, as would seem necessary if governmental expenditures for creating employment were to be based on an orderly planned program.

It follows that any estimates of governmental expenditures necessary to provide full employment, whether the expenditures were to be financed through taxation or deficit spending, would be likely to be wrong in practice. If the full employment scheme were tried over a period of several years, the estimated and actual governmental expenditures were always wrong, and unemployment persisted, what would be the result? The program might be abandoned as impractical, but we may doubt whether the government would want to give it up and whether it would be allowed to do so in any case. It is much more likely that the President and his advisers would decide that full employment could be maintained only if the government had the power to plan production, employment, wages, prices, and virtually everything else, for the economic system as a whole. Anyone can take it from there! The completely planned and controlled economy would be at hand.

This result seems to be implicit in some of the arguments advanced by the advocates of the full employment policy. It is said, for example, that our experiences in the war period proved that it is unnecessary for us to have unemployment in the United States. There is little doubt about this proposition. We can readily have full employment in this country if we are willing to continue to live in a planned and controlled economy such as we had during the war period. It is also argued that the war period showed the fundamental unimportance of financial considerations, or of questions of where the money is coming from, and proved that a high level of production and income depends only upon manpower, materials, plant, and equipment. This also is true in a planned and controlled economy. In a capitalistic system, financial considerations remain important.

This discussion has not indicated that full employment guaranteed by

the government, high controlled wages which are only vaguely related to productivity, and a complete system of social security are either good or bad objectives, or that we should or should not seek them. It has only indicated some of the reasons for thinking that these objectives may be inconsistent with the operation of a capitalistic or free enterprise system and that they are likely to be attained only in a planned and controlled economy. Now a planned economy is not necessarily bad. Such a system could certainly operate more or less successfully. It could furnish us with some things that are difficult, if not impossible, to obtain under capitalism, and it would probably deprive us of some of the things which we are accustomed to having under capitalism. Whether or not we would like it is for us to decide.

A planned economy could provide a degree of economic stability such as we have never known under capitalism. It could keep the wheels turning and the factories producing, and it could avoid those tremendous swings of boom and depression which have marked the operation of our capitalistic system. It could provide full employment according to almost any definition which was considered suitable and, within wide limits, it could devote almost any share of the national income to the purposes of social security. Without furnishing any guarantee as to the size of the total national real income, a planned economy could certainly provide for a more nearly equal division of income among the individual citizens than that which results naturally from the operation of a capitalistic system. Money incomes, of course, could be made as large as desired, for the benefit of people who seem to find a peculiar satisfaction in taking in a large number of pieces of money for their services in a given period. On the whole, if we rated stability, security, and relatively equal division of income rather high on our list of economic preferences, we might like to live in a planned economy.

On the other hand, a planned economy could not guarantee everyone a satisfactory real income merely by dividing the total income of the economy rather evenly among the citizens, while keeping the factories and people at work. It is necessary to have a reasonably large national real income to divide before the shares, however nearly equal they may be, will also be adequate. The size of the total real income to be divided in a planned economy would depend upon the incentives of the people, other things being equal, and I think such an economy might have a serious problem of incentives. The problem would really have three phases. First, how do you get people to work? Second, how do you get people to work hard instead of merely going through the motions? Third, how do you get people to undertake the most important, difficult, and responsible work for which they are qualified? A planned economy, with compulsion as well as positive incentives at its disposal, could

probably solve the first phase of the problem, but it might have more trouble with the second and third phases in view of its guaranteed employment, full social security, and relatively equal distribution of income. In fact, a really tragic decline might occur in that social asset which we may call the individual's sense of responsibility for his own welfare.

Again, we should be quite certain to experience a loss of freedom in the planned economy, and this matter also has several phases. The planned economy can furnish freedom *from* things—freedom from want and freedom from fear (except fear of the government)—but very little freedom *as such.* The individual would no longer be free to found his own enterprise in any field that pleased him and to produce and offer for sale as much or as little product as he wished. He would no longer be free, as the owner of land and capital, to devote these agents to whatever purpose seemed likely to be most productive of income. He would not be free to seek to maximize his income in competition with other men and to hold fast to what he could acquire.

The individual as a worker might lose freedom, for too much security may not be good for labor efficiency. If jobs at good wages must be made available to all, what will keep the worker from taking a week off to go fishing when he pleases? If he feels below par in the morning, what will keep him from showing up for work at nine or ten o'clock instead of at eight? What will keep him from changing jobs very frequently in a search for greener pastures? Serious problems of these kinds have arisen in the Russian planned economy of full employment, and the result has been severe limitations and penalties relating to absenteeism, lateness to work, and labor turnover, and even a labor draft to get people into various necessary but unpleasant lines of work. If similar devices were adopted in our planned economy, the worker would find that he had reached security of employment at good wages only by being tied hand and foot in his job. He would learn that, if the government assumes responsibility for a person's welfare, it is very likely also to assume responsibility for that person's conduct. And he might come to suspect that employment is only a means to an end rather than an end in itself.

It is also likely that labor organizations would lose significance in the planned economy. If full employment is to be guaranteed at high wages and under good working conditions, the government here, as in Russia, probably would not relish attempts on the part of labor unions to secure still higher wages and better conditions of employment by collective bargaining. As a result the unions might well degenerate into organizations for carrying on social and recreational activities, for handling grievances within the enterprises, and possibly for the detailed

administration of social security funds. While the government might require the workers to be members of unions, these organizations and their leaders would be much less important than in our present economy.

Finally, if we were to have a planned and controlled economy, there would be another aspect of freedom to worry about. In theory, if the planners did not give the people what they wanted in a given period of say, four or five years, the citizens would rise up at the next election, throw the rascals out of office, and substitute another set of planners who would make plans which were better suited to the desires of the people. But this might be easier said than done, for there is a grave question as to whether full-fledged economic planning is compatible with the democratic process. Economic planning would require that enormous powers be concentrated in the hands of certain governmental officials who were charged with the making and enforcement of economic plans, and these great powers might be used to destroy democratic control of the government. The planners might come to think that they knew what the people wanted or needed better than the people themselves knew and might be entirely unwilling to doff the great powers with which they had been clothed. It is a common experience to find that it is far easier to give great powers to governmental officials than it is to get them back. In such a case one of the principal plans on which the economic planners would work might be a scheme for keeping themselves in office. As a practical matter, the planned and controlled economy is more likely to be associated with dictatorship than with democracy in government.

If most of the people of this country really believe that the advantages of the planned economy outweigh the disadvantages and want to live in that kind of system, they should have the opportunity to do so. But the question should be decided in the open. We should not try to convince people (1) that the government can assume full responsibility for individual welfare without limiting the individual's freedom of conduct; (2) that millions of people can be given more income than they can earn while all others receive all they earn and keep their incentives unimpaired; (3) that all-powerful governmental monopoly is a safe refuge from the ravages of private monopoly; (4) that we can have less governmental control in the future by adopting complete governmental control at once; (5) that we can insure the continued operation of a capitalistic system by setting up conditions under which such a system cannot operate; or (6) that we can preserve the capitalistic system by substituting a planned economy for it. We should not proceed to the planned economy by subterfuge.

DISCUSSION

EDWARD H. CHAMBERLIN: [The discussion below was written with reference to an earlier version of Professor Knight's paper, prior to the one read at the Cleveland meeting. Because it contained numerous quotations from this earlier manuscript I had expected to rewrite it in order to tie it in more directly with the language used at the meeting itself. Since then, however, Professor Knight has again revised his paper; and in the revision has introduced new and important changes growing out of my discussion. I have therefore decided to print what I said without change.

At the meeting Professor Knight left to a "jury" of those present whether my criticisms of his paper were warranted. The question may now be judged by a still larger "jury" of readers by the extent to which Professor Knight himself has seen fit to add, subtract, and rephrase in order to reduce the force and applicability of the criticisms I had made. All trace has been removed of "requisites" for theory and of what theory "must" do; "reality" as opposed to "theory" no longer appears, and in particular the identification of monopoly and of imperfect competition with "departures of reality" from "pure theory" has vanished; "monopolistic competition" (wrongly conceived) has been introduced for the first time and the whole subject of monopoly given greater importance; business cycles are no longer estranged from "theory" and an "economic law" has even been added in relation to them; the discussion of "immutable law" has been surrounded by further qualification, and many other alterations have been introduced which cannot be further detailed.

The discussion below must now be regarded as of an "unpublished manuscript" by Professor Knight. Despite the strange relationship in which it now stands to the final revision of his paper, I feel certain that those familiar with his views will at least not be under the misapprehension that it is written about someone else.]

Professor Knight has set out to find and describe the "axioms," or "eternal and immutable" laws, of economic theory. The result, however, is something which might more aptly be described as "Knight in a Nutshell"—a compendium of his own system of economics, including most of his better known prejudices. I had difficulty at first in discovering the criterion by which it is decided whether something from "theory" is an "immutable law" or not. But it soon appeared that "immutable law," "economic law," and "economic theory" are used interchangeably by Professor Knight. There can be no doubt that to him "immutable law" and "economic theory" are the same thing.

Is it to be understood that all the principles of economic theory are "eternal and immutable," or does he only mean to restrict the concept of "theory" to those which are? I think rather the latter, but whichever it is, great violence is done to our ordinary ways of thinking, and I cannot believe that many will follow him in the narrow view of "theory" which emerges. Indeed, it appears to me in many respects to be almost unique to Professor Knight himself.

Let us look at some of the exclusions. How many economists would agree that "pure theory must undoubtedly exclude real money altogether"? And note the reason—that it conflicts with an assumption of "foreknowledge free from uncertainty." My own reaction would be that if such an assumption leads, for purposes of "theory," to such a catastrophic departure from reality as to wipe money from the picture, it is time to get rid of the assumption; and I should be inclined to give it an unmerciful beating before casting it out. But to Professor Knight the assumption takes precedence and out goes money, although one might have hoped that good old MV=PT would qualify as an economic axiom in the best sense. Keynesian theories, being partly monetary, presumably pass with money into the outer darkness of "reality." It would be my observation that they have succeeded in gaining the place they have in the corpus of theory in good part because many economists currently seem to think they do a better job of explaining reality than what preceded them.

Another exclusion is business cycles, and presumably dynamic theory in general. They are not mentioned in the discussion of theory, and cycles are specifically classed in the category of "reality" where this term is opposed to "theory." Yet "theorists" study the cycle and other dynamic problems, and propound theories about them. There are generalizations with respect to them which have wide acceptance, and even some propositions which in their abstract form would, I am sure, be assented to by all of what Professor Knight would call "reasonable" economists.

Monopoly and all of its many variations and amalgamations are likewise excluded—relegated to "reality" as opposed to "theory." I shall return to this later. But adding up the exclusions, I am led to recall the quip that it would be preferable to go to Hell rather than to Heaven because all the interesting people would be there.

In Professor Knight's system, "economic theory" is again narrowed and estranged from reality through a kind of fatalistic attitude towards unrealistic assumptions which always "must" for some unaccountable reason be made. To be sure, we are told that the "eternal and immutable" laws of economics are "descriptive of reality." Yet a typical statement is the following: "Economic laws *must* [my italics] be formulated on two assumptions: . . . [which are then given]. . . . But the facts are largely contrary to both these assumptions." Why, then, *must* we, under some mysterious compulsion, assume them? Again, "under the ideal conditions which must be assumed in general theory, the internal organization of the enterprise is immaterial, being equivalent to ideal exchange between individuals in a perfect market." This is making the perfect market do an awful lot of work and to a bad purpose. Why, instead, may not "economic theory" include a theory of the enterprise which is based on realistic assumptions and which will help us to understand the problems of modern large-scale industry?

Again, a "theoretical requisite" is "the assumption of 'atomic' units (negligible in size, hence continuous variability of all magnitudes)." But what are we to do with the cases where the units are in fact relatively large? A substantial body of analysis exists to explain them; why are we

the category of "imperfections," not really a part of "economic theory" at

"required" to leave it out? A mathematician friend observed to me the other day that he thought mathematics should be sparingly used in economics because, so far as he could see, the functions involved were mostly discontinuous, and it did too much violence to the subject matter to replace them with smooth functions. This struck me especially, coming from a mathematician. It is at least another point of view. I suggest as the answer that neither the one nor the other be ruled out.

Another "theoretical requisite" is "rational and errorless choice, presupposing perfect foresight." Of course such an assumption may be useful for certain purposes, or as an intermediate step in analysis, but why in Heaven's name are we *obliged* to theorize under it and never under something else which might be more in accord with the facts? To take only one example, would not a general, though irrational, prejudice in the comparison of present with future have a legitimate place in a theory of interest?

Professor Knight seems to have bound economic theory hand and foot with limiting and narrowing assumptions, and leaves the reader with the uncomfortable feeling that he can like it or lump it, for that is just the way "theory" is. By limiting it in this way, he easily arrives at the conclusion that "there is no possibility that new laws will be discovered comparable in generality and importance with the basic principles long recognized," which is curiously reminiscent of the famous statement of Mill (1848) that "happily, there is nothing in the laws of value which remains for the present or any future writer to clear up." Such a view might be better understood with reference to the first of his two main groups of economic laws—those dealing with the individual, in which are included the laws of choice (or utility) and the physical laws of diminishing productivity. As he points out, these are true without regard to the system of social organization and are of broad and general applicability.

But the second group of laws—those dealing with social organization—depend on institutional factors and the various forms which market relationships may take. Economic theory, if it is to explain reality, must constantly seek new frontiers not only in its relations to other disciplines, but also by seeking new and better assumptions, and deriving them from a vital relation to the facts. It must be constantly changing, and, let us hope, improving. A moment's attention to the problems of this area will serve as a final illustration of the general criticisms advanced in this discussion.

The axiomatic law which is to govern all the highly complex market situations in real life, according to Professor Knight, is that of the "perfectly competitive" market. This is another "must" of "theory." It requires getting rid of monopolistic competition (a good beginning is made by calling it "imperfect" competition) and, what is still more gratuitous, of monopoly itself, "one of the older . . . branches of price analysis." Professor Knight wavers, and in one place grudgingly admits monopoly as a (supplementary) "law" (ruling otherwise, however, for monopsony, and other allied categories); but, since *really* to admit it to a co-ordinate place would raise havoc with "perfect competition," which to him is synonymous with "theory," his general position in this paper is as it has always been—to relegate it to

the category of "imperfections," not really a part of "economic theory" at all.

This position is always in the background, but it emerges clearly in the extended discussion of "theory versus reality." "Reality" is identified with "mechanical imperfections," "various forms of 'imperfect competition,' especially *monopoly*, itself a genus of many species." Monopoly, then, and its cousins, are descriptive of reality, but not a part of "economic theory." It is now clear why "theory" is to Professor Knight virtually a finished subject—any new development (and monopolistic competition is only one example) which is not a part of the theory of a perfectly competitive market simply is not a part of the subject!

It is difficult for me to refrain from offering some "laws" from the field of monopolistic competition as candidates for the category of "economic axioms." Some of them are indeed quite self-evident—to any who are familiar with them. But I must state bluntly what seems appallingly evident to me, that in awareness of the theoretical problems of this field, Professor Knight has not, in his own words, reached "the point where real discussion should begin." Witness his dismissal of them as mainly due to imperfect knowledge! And the reason is not difficult to find. He is interested in "economic theory," and these matters are not a part of the subject. This will seem strange to many, but apparently there is nothing to be done about it. To Professor Knight, that is just the way "theory" is.

To summarize my own criticism, the subject of *economics* is changing rapidly. I believe that *economic theory* should change along with it.

David McCord Wright: One may certainly agree with Dr. Ayres that the Keynesian philosophy did not spring suddenly into existence. It has roots, and Lord Keynes has described them himself:

> I regard Mr. Hawtrey as my grandparent and Mr. Robertson as my parent on the path of errancy. . . . I find looking back that it was Professor Irving Fisher who was the great-grandparent who first influenced me strongly toward regarding money as a real factor.[1]

Again there is Alfred Marshall, Keynes's teacher, and the father of the whole Cambridge school, whose testimony before the Gold and Silver Commission, December, 1887, shows striking hints, not merely of the Keynesian attitude, but of Professor Ayres's own views. Marshall said:

> It seems to me that the great economic feature of this age, more important than every other fact put together, is that the amount of capital is increasing many times as fast as that of population. . . . The "extravagant" American is saving more than any other person. In spite of all the inventions . . . making new uses for capital in the form of machinery and in other ways, this vast increase forces down the interest that can be got in business. . . . *I do not mean the growth of credit, I mean the growth of things, the actual excess of production over consumption.* [italics added] I do not see any necessity at all why interest should be more than 2 per cent a century hence. I should not be at all surprised if a railway company could borrow on debentures at 2, or even less than 2, per cent in the next century.[2]

Yet Dr. Ayres mentions none of these.

It is difficult to escape the conclusion that Dr. Ayres's well-known distaste for academic economists and business culture has led him to minimize

[1] J. M. Keynes, "Alternative Theories of the Rate of Interest," *Economic Journal* (1937), p. 242.

[2] Alfred Marshall, *Official Papers* (London, 1926), p. 49.

the "orthodox" sources of Keynesian theory. Like many others, including Sir William Beveridge, he selects the elements which please him and discards the rest. Such an outlook may be called "streamlined" Keynesianism.

It would be interesting to discuss the genesis and the accuracy of streamlined Keynesianism as an interpretation of Keynes's book. The vital point today, however, is not how the system developed but whether it is a correct guide to policy. Dr. Ayres adopts the Keynesian assumption that a large part of the short-run supply of real saving is "automatic," and the writer would certainly concur. But he deduces from this assumption the apparent conclusion that we no longer need capitalism and that the problem of economic welfare, once capitalism is overhauled, or abolished, will pretty well care for itself. With this one must disagree.

The writer finds himself in enthusiastic agreement with the methodological content of Dr. Ayres's paper and in equal disagreement with its policy implications. Certainly the economic whole can be greater (or less) than the sum of its parts. We cannot bake each egg and make a cake. Credit, as Marshall said in 1887, is different from capital. A great part of modern saving is automatic. But what has this to do with the pros and cons of business enterprise and capitalism?

Dr. Ayres views the basic issue as one of obtaining an "institutional setting that imposes no obstacles to the growth of industrial plant and the improvement of technical methods." He seems to feel that "modifying the flow of income" will do the main job. This point of view appears to me nearly as naïvely optimistic as the older Spencerian theory somewhere described as teaching that "we were all bound for heaven in a perambulator labeled evolution." I submit that Dr. Ayres enormously underestimates the obstacles to "planned" realization of the social heritage, and that he overlooks the broader implications of Veblen's teaching regarding sabotage.

Unlike Dr. Ayres, I do not believe that the association of science, competitive capitalism, and growth is accidental. I find my chief sanction for the competitive order in a principle which I will call "the law of deterioration of self-perpetuating groups." Where access to the top is conditioned on the consent of those already there, promotion is likely to go to the agreeable conformist rather than the able explorer. The group in power increasingly surrounds itself with yes men. The caliber of the "palace guard" rapidly declines.

I set up no myth of perfect competition. But will anyone deny that *relatively* to the feudal planned states which preceded it, the capitalist upper classes in this country have been more open to access from below than any society we know of? And it is precisely because of this that the new technical idea has had so tolerable a chance.

But a comprehensively plannned state implies eventual rule by a self-perpetuating group of specialists. For in planning what industries are to expand we almost inevitably plan what groups hold power. And how long will political freedom survive severe restriction of the right to transfer beyond the reach of an arbitrary bureau chief? The little business that counts is the little business that has a chance to be big business. It is time

that we liberals considered how much our redistributive income tax and other policies are serving to foster monopoly, to stratify society, and to hamper the independent access to the top on which technical progress—and even more important things—depends.

Impressive relative short-run efficiency in certain instances of planning may often be explained by reference to what I will call "the idea of an imperial age." When ideological decay has undermined the sanctions for competitive change, when pressure groups begin to run riot, then centralized power may be called in to reassert the general welfare. Undoubtedly in the short run the new control will be more efficient. It may realize fairly fully the latent technical implications of the state of the arts when it took over. *But the springs of further progress are being drained.* Thus the flowering of Roman life under Octavian led to no comparable further development.

Professor Ayres seems to assume that the substitution of some form of "planning" for the pricing system will eliminate the conflict of individual welfare and social progress. The roots of many such opinions trace back to mechanical nineteenth-century applications of the hedonistic calculus, and to our habit of balancing the "disutility" of labor against the "utility" of consumption. An easy inference of the idea of "disutility" is that it does not much matter what a man does on the "job" as long as he does not do much. The inevitable change and occupational obsolescence of growth is held to create no problem, for one job will look nearly as good as another. Such an opinion, even if it were possible to ignore the grosser forms of self-interest, in their socialist manifestations, is still inadequate. It totally overlooks the instinct of workmanship and the pride of a man in his profession. His *artistic* sense is outraged by the abandonment of his craft. "Capitalistic" sabotage should be called "security" sabotage. It arises because in a growing society—*any* growing society—some people will be hurt by change and they will do their best to prevent it.

What good does it do to have "automatic" saving if that saving cannot be made effective? And how partial at this late date to see only the capitalist obstacles to effective growth. Economic progress is a perpetual conflict between the dead hand of vested interests and the enterprize of the new. If my law of deterioration be applied, it seems to me that comprehensive planning, of the 97 per cent order, casts the balance of power fatally toward the dead hand.

There are other implications of Dr. Ayres's paper which should concern those intellectuals who espouse the opinion made fashionable today by E. B. White out of Brahma via Thoreau (to say nothing of earlier writers) that it is competition which is responsible for the ugliness and evil of modern society. How near Utopia we must be if only competition stands between us and the true and beautiful!

But the clue to social progress, I submit, lies not in abolishing the competitive game but in *improving the rules by education of the players.* If acquisition helps breed selfishness, growing living standards make for unselfishness. Putting the matter in a somewhat Chinese way, betterment comes

by inculcating an increasingly humane code of competitive "good manners." As one does not seek to win a tennis match by hitting one's opponent over the head, so we obtain progress by making it "bad form" to get rich in such ways as sweated child labor. Not the *end* of competitive acquisition should be our aim but the competitive acquisition of nobler things in a nobler way—the inculcation of higher aesthetic and ethical values. This last was Matthew Arnold's concept of the role of criticism.

Democratic progress, I suggest, comes through the existence and effect of an active censor class. This class in America may be roughly identified with the intelligentsia, and its long-run influence, as Dr. Ayres also seems to believe, has been immense. Increasingly, however, the intellectual is forsaking his critical function for active political intervention and his excuse is that it is capitalism which creates the Philistine.

I agree with such men in their stress upon the importance of the aesthetic. I have an equal dislike for the sordid, hasty vulgarity of much modern life. But I cannot help feeling that in blaming the Philistine upon capitalism the intellectual is rationalizing his treachery to his higher aim and his selection of a weaker enemy. The roots of philistinism in our society go far beyond mere capitalism.

Space is lacking to summarize the philosophic currents which have culminated in the modern attitude. But will mere planning bring beauty to a people whose thought is "come unto me all ye that are heavy laden and I will give you—gadgets?" To get a plan adopted one must promise them more gadgets. Notice that Professor Ayres emphasizes *industrial* plant and *technological* achievement. What of the other, higher values? In the end, I believe, the intellectuals who destroy competition because they hate Main Street will find that they have destroyed the very diffusion of authority which protected them from Main Street. We know Babbitt the Business Man. What of Babbitt the Bureaucrat—the bureaucrat of the state theater?

The basic moral dilemma of modern civilization is that progress, as Whitehead puts it, comes when a society can re-examine its presuppositions. But it is hard to make a religion of doubt without some day doubting the doubts which makes doubt possible. Our scientific anarchy dissolves all values, and, until we evolve a sanction which can resist its corrosive action, our world will be a sick one. Much of the preoccupation of the intellectual with economics today is the product of despair. It is easier to "sell" the public on social security than on artistic appreciation. Do not misunderstand me—we need both; but, if we only get the first without the second, our work in its highest sense has been a failure.

In the realm even of technical economics the discouraged intellectual is taking the lower road. What is our talk of raising the average propensity to consume in the United States but a decision to enjoy what we have and let the outside world starve. As soon as we forsake our parochial preoccupation with the American market, it seems to me nothing short of blasphemous inhumanity to speak of "too high" an average level of saving today. Hundreds of children are dying at this moment in Europe because the best

paid labor in the world refuses to work without two cents an hour more. And some intellectuals support them because they doubt if there are investment outlets abroad for a margin of two to four billions a year! With what bitter irony a Chinese, a Russian, an Indian, or even a Frenchman must hear these discussions. But it is easier to preach consumption than to try to overcome the gigantic, ignorant prejudice against foreign goods which is our basic problem.

In the short run the same bias swallows up all business cycle theory in the marginal propensity to consume. "There will be a slump someday," it is said, and Mr. Reuther feels he will prevent it by removing the profits lag. The fact of the matter is, however, that the rate of expansion tolerable in a democratic society is *always* faster than is consistent with steady advance, and this fact can be quite independent of profits lag and the marginal propensity to consume. Can we "expedite" the housing industry and stabilize it at the same time?

Lord Keynes has given us an apparatus which enables us to analyze short-run lags of effective demand and to propose ways of keeping them within bounds. But when it comes to the secular problem (though I have no way personally of knowing) I seriously doubt whether Keynes is still a Keynesian. Can any man, genuinely considering the world as a whole, really believe that the *average* level of saving is redundant now or in the foreseeable future?

Unless the intellectuals take renewed courage and return to the higher duties of criticism, the outlook for the Western world is dark indeed. And in the field of technical economics as well, we need a braver course. Conceding the need on occasion of short-run maintenance of demand, we must still realize that our greater duty, if we are really citizens of the whole world—the one world—is to remove obstacles to investment.

My time has been brief and my presentation necessarily fragmentary. I do not wish to be understood as giving a blanket indorsement to the *status quo*. My philosophy is more truly revolutionary in many ways than most of those with a "radical" tag. But I feel that we are in danger of taking a fatally wrong turn; that we economists are betraying our duty for our ease; and that in confusing literal equality of income with democracy and redistribution with progress, we are far more likely to be destroying the "social heritage" than "removing obstacles to its enjoyment."

VICTOR ABRAMSON: Professor Ayres properly emphasizes the influence of the Great Depression in centering attention on real, as distinct from pecuniary, considerations, both in economic thinking and in the determination of public policy. But, paradoxically, the Keynesians, whom he credits with touching off the recent "revolution" in economic thinking, have stressed monetary and fiscal programs of public action, to the neglect of other appropriate measures which would affect the operation of the economic process more directly.

The principal result of this revolution, according to Professor Ayres, has been the rejection of the classical orthodoxy that national well-being

rests on capital accumulation and this accumulation, in turn, on the savings of the rich. Professor Ayres anticipates that when there has been a full realization that social goals are not limited to the growth of capital, nor individual savings the sole source of capital funds, it will become clear that we should properly treat our peacetime economy as we have our war economy—impliedly by having the state determine the volume and allocation of capital resources. Society, no less than the individual, Professor Ayres appears to say, may overcome the limitations of a lack of real capital by the necessary provision of funds; that is, authority to undertake enterprise. From this he concludes that if power to create capital funds is given to the state, we may overcome the limitations that now hamper economic progress where capital accumulation rests largely on private decisions.

But to present the issue in this way is to ignore the problem of choice which will remain between the infinite variety of uses for the limited supply of productive resources. There is no magic whereby the state can overcome this limitation; so that the issue resolves itself, as we have always known, into a determination of the division of authority which will yield the best social results. A decline in the marginal efficiency of capital even to zero will not obviate the necessity for its careful husbandry, because it is inconceivable that capital will ever become free in the economic sense. No matter what means are employed for determining the amount and disposition of capital, therefore, choices will have to be made among the alternative uses for the limited (even though costless, except for maintenance) supply of capital. And if the supply of capital is to be expanded beyond a certain point, there will also have to be a choice between consumption and saving. The atomic bomb project, which Professor Ayres cites as an illustration of the new understanding of the significance of capital accumulation and use, involved at the time of its inception a most difficult problem of choice, in view of its enormous size, uncertain prospects, and the broad range of military demands with which it had to compete.

It is because they recognized that these problems of choice would never be overcome at any foreseeable time and not because they were "grateful to the rich" that the classical economists approached the problem of capital accumulation in terms of individual savings. They saw in the price system a means whereby individuals could be allowed a maximum of freedom in giving expression to their own views of economic progress, through their decisions concerning consumption and saving and the use of their time and effort. While under the system which they envisioned capital accumulation would take place largely through individual savings, they ascribed no special virtue to such savings as against any other rationally conceived choice. And they understood with a fullness that is not common today the many factors which may influence both individual and national conceptions of opulence. At the time the classical economists wrote, the primary economic problem appeared to be the accumulation of capital, and their analyses emphasized the importance of the savings of the rich as the source of such accumulation. But they did not accept capital accumulation uncritically, as the only proper test of economic achievement. Nor do those who today

follow in the classical tradition hold these simple views of the merits of the private enterprise system.

Professor Ayres appears to regard the defense of the price system on grounds of "administrative indispensability" as weak—weaker even than its justification as a stimulus to the accumulation of capital by the rich. But "administrative indispensability" is only one way of saying "the best of the known alternatives." In a similar vein, Professor Ayres states that to accept classical laissez faire merely because the alternatives seem less desirable is to indicate that it can "no longer be loved for its own sake." But the choice is surely not the less to be admired because it is not solely of the heart.

If the role of the price system is to be challenged, it must be through an attack, wholly or in part, on the merits of individual choice as against the decisions which would be taken by the state. It cannot be assumed for these purposes that the state is capable of creating capital resources without having to forego some other desirable goal of economic progress. Nor can it be considered that the wisdom of the choices which are made by the state will always necessarily excel those of the individual. For these are the issues to be determined.

I believe that Professor Ayres assesses the primary influence of the Great Depression most correctly when he points to its effect in bringing about a reappraisal of the roles that should properly be assigned to the individual and the state in our economic life. His citation of Cannan's critique of the limitations of classical capital theory, as failing to give adequate weight to the activities and possessions of the state, and even to scientific and technical information, as a part of the capital of society, calls proper attention to a basic deficiency. There can be no doubt that the Great Depression has had the pervasive result of stimulating an awareness of the importance of the positive contribution that government can make to the maximization of the social product. But it may well be that the final revolution will not take the form that Professor Ayres foresees.

The primary thrust of the Keynesians has been to retain the operative mechanism of the price system (which Professor Ayres believes has outlived its usefulness) and to bolster it by monetary and fiscal devices designed to prevent its periodic breakdown. There is, however, a growing feeling in many quarters that financial measures of whatever nature are inadequate to cope with the basic economic problems we now confront unless they are accompanied by an effort to remove certain rigidities which at present encumber the free functioning of the price system. It is not for for me here to discuss the essential importance of the proposals which have been advanced for improving the knowledge of individuals and their responsiveness to market forces on a competitive basis. It is enough merely to note that they represent a rebirth of confidence that the maintenance of private competition is an enforceable objective, and one under which the price system can be made a useful sociai instrument. It is difficult to know, from where we now stand, which revolution will triumph. The probabilities are, it may be hoped, that each will, in proper degree, to the exclusion of private monopolies unaccountable to the state.

Our vision of the impact of the Great Depression on economic thinking is likely to be distorted if we enforce our depression experiences, as Professor Ayres has done, with references to our wartime experiences. The proper role of the state, even in the view of the neoclassicists, is greater in time of depression—and it is immeasurably greater in time of war, for reasons that are obvious. It is therefore easy to believe, when we view the generally accepted expansion of the role of government during the war and recite its many achievements in improving efficiency (mainly in industries that are essentially of a war-nature) and in absorbing many of the ordinary unemployable, that the same means are equally appropriate for carrying out the greatly different tasks of a peacetime economy. While we have generally experienced an aftermath of new controls as a result of the wartime role of the government, however, a proper assessment of the impact must await the calmer days of peace. This applies as much to the economic thinking of the period as to its specific manifestations in the form of action by the state.

Abram L. Harris: Professor Blodgett's paper deals with two problems: (1) the impact of the recent war upon abstract principles of economic behavior and (2) the possibility, accentuated by the war, of a change in the present form of economic organization. I am in general agreement with his statement of abstract principles and with his view that the war has not affected their essential character. The principles of economy—for example, those of diminishing marginal productivity and opportunity cost—are axiomatic and, accordingly, valid wherever human wants are satisfied by means of a rational organization of economic effort, whether that organization takes the form of enterprise motivated by profit, collectivist planning, or of a joint control of industry by labor and management. The war has thus created no essentially new frontiers in traditional theoretical economics, which of course is not to say that the present state of the science is altogether satisfactory. The new frontiers focused by postwar exigencies are connected mainly with problems of progress, particularly those relating to change in the form of economic organization.

Wartime control of the economy has left us with a legacy of experiences which seems to strengthen old habits of thought, looking toward a replacement of competitive organization. As Professor Blodgett puts it, the "leading economic issue of the day has to do with the kind of economic system we shall have in the postwar period." And he thinks that "the chances of finding ourselves living in a controlled and planned economy are excellent." He supports his position by forecasting the adverse effect such governmental measures as guaranteed full-employment, maintenance of wartime "take home pay," and the increase of minimum wage levels will eventually have upon an enterprise system. But these and the other measures mentioned by him are simply concrete examples of a broad pattern of influences which reflect discontent with a market organization of economy and which make government intervention in market operations necessary or desirable. What I miss in Professor Blodgett's presentation is a consideration of this broad pattern.

If for no other reason than to provoke discussion, I should like to call attention to three features of this pattern. They are: (1) laws and policies of the federal government; (2) the gradual transformation of voluntary associations into instruments of economic power, recognised and supported by federal law; and (3) discontent with the enterprise form of organization.

With respect to the policies and laws of government, mention can be made only of those pertaining to wages and prices, the prevention or encouragement of monopoly, and the exercise of monopoly power. Postwar wage policies are designed to increase purchasing power or to maintain it at wartime levels while at the same time preventing an inflation of commodity prices. The policies reflect the prewar monetary and fiscal ideas of deficit financing and, also, the current agitation for full employment guaranteed by the federal government to which Professor Blodgett referred. One seldom discussed aim of federal wage policy seems to be that of assuring workers a living wage; that is, a standard of comfort which may not be warranted by strict adherence to the principle of labor's productivity. Such a wage is made to appear a reasonable charge upon industry by various official government predictions concerning industry's future productivity and its "ability to pay." These forecasts of course create an expectancy of wage increases which, in the absence of a rise in price, may be considered impossible by those who now bear the responsibility for making decisions in industry. Now the ideal of a living wage is a desirable social objective. But the question is how to achieve it without substantially altering the present form of economic organization. When the living wage exceeds the scarcity value of the labor in question and when, as is now the tendency, it is made a full charge against the employer furnishing the employment, it is difficult to see how it can be generally applied within the ambit of enterprise economy. The ultimate consequence of the policy appears to be something approaching general monopoly and, eventually, an authoritarian control by government over prices, wages, and manpower. The immediate tendency is the substitution of the judgment of government tribunals for a market determination of income shares and, likewise, for collective bargaining within the framework of a relatively free economic system.

The government's fumbling and hesitancy in its treatment of business monopoly are hardly reassuring when one considers the present trend toward expanding governmental controls over economic life. The remissions of government in the face of corporate abuses and its laxity in prosecuting conspiracy in restraint of trade need only be cited as examples of its failures in curbing business monopoly. In government circles it is a somewhat prevalent notion that the main way to deal with business monopoly power is to encourage the formation of organized pressure blocs to offset it. The most powerful of the blocs recently established is represented by the great trade union federations.

Trade unions arose as voluntary associations which for some time suffered some disadvantage in comparison with business corporations. Today, however, by virtue of public sympathy and federal law, they are instru-

ments of incalculable economic power. The power as exercised by them tends increasingly to substitute collective action and organized leadership for the market. The strategy in wage bargaining has come to be guided by the idea of absorbing as wage increases, gains from technical efficiency in particular industries, thereby preventing the translation of these gains into lower consumer prices and expanding output which competition would ordinarily bring about. The policy if generally pursued would extend the collective bargaining process to include control over prices as well as wages and, likewise, over output and the return upon investment. The establishment of this control is the goal of at least one of the great labor federations. Spokesmen for this organization have stated as their objective the establishment of joint control of industry by labor and management in a system of "national democratic planning."

Along with the growth in trade union power there have developed certain beliefs and practices which are inimical to a free society. Among these are: (1) the coercion of minorities and individuals which trade union leaders justify by appealing to the principle of majority rule (the War Labor Board's "maintenance of union membership" should be noted in this connection); (2) the belief in an absolute right to strike—a "right" which is defended by trade unionists on the ground of the individual's normal right to quit work; and (3) the use of mass picketing to prevent ingress and egress to markets which is held to be a mere extension of the principles of free speech and assembly.

The objectives and policies of trade unions, and, also, those of the government, have undoubtedly been influenced by a growing discontent with the capitalist system. Some of the discontent is caused by imperfections of the system, notably by income inequalities which, incidentally, are to some extent due to factors lying outside the economic system. But much of the discontent is animated by what Arthur Koestler calls an "anticapitalistic nostalgia." This feeling seems to originate in an antipathy to the ends by which the system is typically motivated as a want-satisfying mechanism. Capitalism is condemned, not so much because it realizes its peculiar ends imperfectly, but rather because, well, it is the kind of system it is. It is accordingly condemned as "wrong" or "immoral" because it is believed to stress the pursuit of pecuniary values and to place a premium upon the traits of rivalry and emulation, which are said to prevent *true* co-operation. In such judgments the strictly economic issue of efficient use of resources in satisfying wants is confused with a moralistic evaluation of profit making. They thus prevent an intelligent discussion which looks toward a correction of the practical defects of the capitalistic order.

Professor Blodgett mentioned the probable loss of individual freedom and responsibility as a crucial issue which a change in the form of economic organization presents. Another issue considered by him in this connection relates to the problem of incentives to productive efficiency. There are other questions which I think should be considered in addition to those he mentioned. All present programs of economic reorganization have as their central purpose the shifting of power with respect to the making of major

decisions in industry. Some of the programs propose to place this power in the hands of technicians. Others would have it transferred to the representatives of labor or to public bodies. But in any case efficient production would require that the power be exercised responsibly, which is to say that those who exercised it would have to accept the consequences of their acts.

JOHN KENNETH GALBRAITH: In his concluding comments Professor Blodgett poses once more the issue of security versus freedom. He asks us whether we are prepared to abandon capitalism (which, by implication he defines as what we have now or had before the war), for a society in which, to use his adept phrase, there is freedom from want and freedom from fear but very little freedom. While professing to be indifferent as to the outcome—an indifference that I somehow suspect is not quite complete—he pleads for a deliberate choice. He fears that we will take the road to planning as the result of political innocence or be led along the path by subterfuge. He wants, instead, a *planned* decision between planning and no-planning.

My question is whether the alternative that Professor Blodgett presents (and many other people are presenting it these days) is a real one. Do we in fact have but two roads: one leading to the all-powerful state with economic security but with complete direction of all economic decision and another that leads to individual freedom the price of which is insecurity? Professor Blodgett makes this point by assumption rather than by argument and I should like to question his assumption.

One of the landmarks along the road to total planning, Professor Blodgett believes, is social security—unemployment, old age, and survivors insurance and presumably sickness insurance. Now this, fortunately, is something with which we have had some experience; it is not a ghost of the future but part of the record of the past. Did its introduction in the thirties change, in any very fundamental way, the structure of American capitalism? I think not. Entrepreneurs retained their control over investment and production decisions, and it is hard to see how their incentives to lower costs and extend their market was impaired. The lodging of these powers of decision and these incentives with the owner of the capital assets or his designee is surely central to capitalist structure. I suggest that few entrepreneurs could distill from the changes brought by social security any real diminution in their prerogatives.

Fiscal intervention to support the level of employment, minimum wage, high trade union demands are among Professor Blodgett's other landmarks on the road to total planning. I am inclined to think that much the same question might be asked about these as about social security. They are not new; did they, as we saw them operate before the war, strike at the fundamentals of capitalist organization? Professor Blodgett, to be sure, is thinking of the future—a future in which these several measures will be extended. But if we have come as far as we have without undermining capitalist institutions, is it not probable that we can go a bit farther?

At least are there not roads toward security along which we can travel

if we are discriminating in our choice of paths. During the thirties we had for a brief period the NRA. That, with its quasi-government control over price and production decisions, did fundamentally alter the scope and character of the entrepreneur's discretion. Under NRA he did surrender authority to the state or an agency of the state. A legacy of the thirties and the war are the high farm support prices. These have surely changed fundamentally the pattern of agricultural organization—especially if, as one can have good reason to suppose, they are retained for the next few years and supplemented by production controls. Under NRA had it survived and under present farm policies if they survive, the individual entrepreneur's authority over investment, production, and price decisions has been transferred to the government. Here are measures which directly challenge the pattern of capitalist organization.

If my argument is valid there are some measures looking toward increased security which are not in conflict with capitalist prerogatives. These include some of the measures about which Professor Blodgett worries most. And there are other measures which Professor Blodgett does not mention that are seriously in conflict. The problem, therefore, for the man who wants to preserve capitalist institutions is not to issue a blanket indictment of all measures that enhance security. Rather it is to support those steps toward greater security of income and employment that are consistent with free decision by entrepreneurs and to indict those that are not.

The notion that free capitalist institutions and security are totally incompatible is, in my judgment, one of the most unfortunate clichés of our time. Perhaps it traces to the old Puritan doctrine that while you can have some good things in life you can have them only at the cost of something else that is painful. I hesitate to think what would have happened to so-called "technical progress" if the idea had always had universal acceptance. The first automobiles had a considerable advantage over the horse in speed and range; the price of these was considerably less security in arrival and return. I am sure my father when he bought his first Ford supposed that this insecurity was the price he had to pay for the virtues of travel by automobile. Detroit in those days, fortunately, was filled with *Candides*. They blithely set about building an automobile that had both speed and security of performance. For those who want the freedom and dynamics of widely decentralized decision in our economy together with enhanced security, the task may be the same. I am not so blindly optimistic as to suppose that there is an easy formula. But I doubt that at the outset we should conclude that the task is impossible—at least so long as there is evidence from our recent history that the paths to freedom and security are at least partly convergent.

MONOPOLY AND COMPETITION

THE OUTLOOK FOR EFFECTIVE COMPETITION

By George P. Comer
Department of Justice

As an economist on the staff of the Antitrust Division of the Department of Justice, I assume that I am not expected to review the whole field of economic conditions under which competition may thrive, but that I should confine myself largely to restraints of trade which are forbidden by the antitrust laws. Obviously "effective competition" is a stool which stands on many legs only one of which is enforcement of the antitrust laws.

I shall start out with the elementary proposition that the "outlook for effective competition" depends, among other things, upon a continuous and unremitting enforcement pressure of the Sherman Act largely administered by the Department of Justice and other antitrust laws enforced primarily by the Federal Trade Commission. My discussion will be largely limited to the policing effect of the Sherman Act.

No profound economic philosophy is here attempted. The main text is as simple as the traffic lights on the street corner. Without them and the police force back of them, traffic would be worse than it now is. That is to say, monopolies and restraints of trade are bad and are getting worse, but they would be intolerable without the policing effect of the antitrust laws. "Other things being equal" the more money coupled with intelligent effort spent on antitrust enforcement, the more competition we shall have in American industry. It is as simple as that. I assume we are not discussing the merits of competition. With this elementary assumption, I should like to avoid arguments on general principles and get down to cases submitted as proof of the policing theory.

I should like to tell you why in concrete terms an unremitting policing job is necessary for the survival of competition. This job is necessary, not because businessmen are criminals, but because the reports from the bookkeeping department indicate, in the short run at least, that monopoly and restraints of trade will pay if you can get away with it. It will pay a large corporation to agree with its competitors on price fixing. It pays to operate a basing-point or zone-price system. If patent pools can be organized, especially with hundreds or thousands of patents covering a whole industry, the profits will be enormous. If an international cartel can be formed which really works, the very peak of stabilization and rationalism is reached. If the management of all the large units in an industry can get together with the labor unions in the industry, a number of birds can be killed with one stone. And finally, if the government

can be persuaded to legalize the restrictive practices, the theory of "enlightened competition" is complete.

The proponents of all this machinery of control are convinced that there is no sense to competition anyhow and that it is a destructive force inherent in nature which must be controlled and channelized as firmly as atomic fission. Naturally they are against "monopoly" also but not against its numerous synonyms.

I can think of no more persuasive arguments in favor of my thesis of unremitting enforcement of the antitrust laws to support effective competition than to review a few sample cases in some of the many patterns of monopoly which have developed in American business in the past fifty years.

Price Fixing. I am not inclined to take the time of a group of economists to discuss the question of price fixing. I assume that all of us will agree that it is economically unsound at the private level and that meetings of competitors in which such agreements are reached are to be condemned without further specification and discussion.

Price Formulae. More subtle forms of price fixing, such as basing-point prices and zone prices, require further discussion than the simple price-fixing agreements. I do not want to stop the clock to argue the merits of the basing-point system. I shall rest my case largely on the statement that on May 26, 1942, the Navy opened bids for thousands of barrels of cement for delivery at seventeen points on the Atlantic Coast reading down from Portsmouth, New Hampshire, to Pensacola, Florida, and that although the bid price at each point of delivery was different, the price at any particular point was identical for all companies, with minor exceptions.

At Portsmouth, New Hampshire, for example, sixteen companies bid identical prices at $2.61 per barrel. The same number of identical companies bid $2.54 at Boston. At Philadelphia, thirteen companies bid $1.98 and at Dahlgren, Virginia, fifteen companies bid $2.42. Immediately someone says, "How could competitive prices of a standardized product such as cement be anything else but identical?" To which I reply, "I do not know, but as a matter of fact they are not identical west of the Rockies as a rule."

This identical bidding has been going on for at least twenty-five years in the cement industry and the files of the Department of Justice contain so many thousand identical bids on government contracts that I have become slightly intolerant in arguments on the merits of the basing-point system. When the system is working, as it usually does except in times of serious depression, every office boy can quote the price of cement at any destination in the United States by the use of the base-price list and the freight books supplied by the Cement Institute.

That is price fixing in its most mechanical and infallible form. If there is a mistake in the freight books, it must stand in the price quotation until corrected in the next edition of the Institute's freight service.

Normally and especially in a seller's market, the basing-point system requires little private policing to keep it in smooth operation. If someone becomes overambitious, especially a nonbase mill, which by assumption is heavily protected in its home market by the freight pattern, and desires to get a little additional business by shading the formula price, he can usually be brought in line by a friendly telephone call from a base mill, and if he persists, two or more base mills may get together by phone and plaster a punitive base on the chiseler at or near his home town. This punishment is too disastrous to be administered except under great provocation because it robs the nonbase mill of all freight protection.

The thesis is here maintained that formula prices—especially the basing-point systems—are among the most serious forms of price fixing and that whenever they are supported as they usually are by any agreements or collusive action in support of the system, antitrust suits must be prosecuted in the industry as surely and inevitably as the relations of cause and effect. This is the reason the Antitrust Division has a suit against the cement industry now pending in the Federal District Court of Colorado.

Price Leadership. The control of prices through price leadership is one of the most far-reaching methods of price fixing that is used today in American industry. It seems to be as effective as the basing-point price system and far more widespread in its application. Price leadership is disastrous in two respects: first, because it does not pay anybody to cut prices in an environment where price leadership operates; and, second, because in times of depression it shifts the burden of reduced production onto the shoulders of the labor force.

It does not pay producers to cut prices under conditions of price leadership because in half an hour after a move downward, all competitors meet the lower price and they all find themselves in the same boat with a lower price level and, most important of all, with a greatly reduced margin of profit. That is to say, a 10 per cent reduction in steel prices, for example, may represent a 50 per cent reduction in unit profit. As many industrialists have remarked in our conversations on price leadership, "Why should I not follow the leader in my price policy? When he goes up, naturally I follow, or the board of directors will fire me, and when he goes down, I have no other recourse than to follow." The net result of the price leadership pressure is that prices can move in only one direction; namely, upward, in terms of economic logic. There are many long-run exceptions to this rule in new industries but

usually not in the short-run of the fiscal year, nor in the long-run for mature industries.

The second effect of price leadership may be even more serious than inflexible prices because under conditions of leadership the forces of depression are shifted largely away from management onto the shoulders of labor in the form of unemployment. This is one of the most serious things I see ahead after V-Day plus three to five years. Stated in elementary terms, the bookkeeping department will probably be able to prove to the management of great industries that they will lose less money by keeping up the prices and turning off the men. The worst part of it is that the bookkeeper may be right by the normal tests of business expediency. How serious this situation may become is illustrated by a few statistics from the last depression. Beginning with A, in the case of agricultural implements, wholesale prices declined 14 per cent from the 1929 high to the depression low about 1933 or 1934. During the same period pay rolls in the implement industry declined 83 per cent. In iron and steel for the same period, prices declined 16 per cent and pay rolls 75. In percentages, cement prices were down 13 and pay rolls 72; aluminum prices declined 21 and pay rolls 69; in tires and tubes, prices were off 20 and pay rolls 64. At the other end of the competitive spectrum, in cotton goods prices declined 43 per cent and pay rolls 51 per cent; knit goods 42 and 42; leather goods, prices off 44 and pay rolls 42.

It is apparent that the industries in which prices were the most rigid and pay rolls the most disastrously low were in the industries which are notorious for price controls either by price formula, such as steel and cement, or price leadership, to be charitable, such as agricultural implements, or outright monopoly as in the case of aluminum ingots.

If you are interested in the wide scope of concentration of control of industries in which price leadership flourishes and therefore in which it will pay industry to support prices and cut the pay rolls, I refer you to pages 117 and 118 of TNEC Monograph 21 on *Competition and Monopoly in American Industry*. I assume most of you are familiar with this document. Therefore, I shall not labor the point. Starting with inlaid linoleum, in 1937 four companies produced 100 per cent of the supply. The following figures refer to percentage of supply controlled by four companies: electric meters, 100; refrigerating systems, 95.4; typewriters, 91.2; tractors, 90.6; copper plates and sheets, 90.5; aluminum ware, 90.5; passenger cars, 90.4; electrical transformers, 87.8; window glass, 85; cigarettes, 85; rolled steel, 84; rubber shoes, 83; matches, 82; electric motors, 79; steel plates, 79; rubber tires, 76.5; granulated sugar, 76; and wool goods, 76.

It is here maintained that when a handful of companies control the supply of products in dozens of industries such as are listed in the

TNEC tables, the burden of the coming depression will be thrown on the labor force to a greater extent than ever before. Management will be under almost irresistible pressure between the board of directors and the bookkeeping department to hold the price line and cut the pay rolls 50, 60, 70, and 80 per cent. I do not need to tell this group of economists what that means in terms of economic disaster both to the workingman and to the whole economic system when the purchasing power dries up to the tune of 75 or 80 per cent of the pay rolls of the great industries of the country.

You may ask what this all has to do with enforcement of the antitrust laws. Just this: in a great American industry with standardized, supposedly competitive products, no producer under the theory of competition has the right to be in a position where he can decide whether his policy shall be one of high prices and restricted production or low prices and high production. The very conditions of choice assume a considerable degree of monopoly or tacit agreement among competitors. If the industry is truly competitive, he has *no* choice in the matter. He will do like the farmers do—produce as much as he can and sell at the market price.

From the point of view of antitrust enforcement, the only way to bring about a reduction in the power of price leadership is a long and expensive series of dissolution suits, so that four or six or eight companies will not control 70, 80, 90, or 100 per cent of an industry.

Trade Organizations. The better and more vigorous the trade organizations in a particular industry, the more likely they are to violate the antitrust laws. It requires a distinct act of the will to hold down association enthusiasm below the line of restrictive practices. "Reasonable competition," "standard specifications," "regular channels of trade," "realistic statistics" are all appealing sirens on the way to the precipice. I have a genuine admiration for the successful trade association executive who keeps the morale of his organization at fever heat without violating the antitrust laws—if such there be in this imperfect world.

Take the case of association statistics. Of course, we have got to have statistics of production, of sales, of inventories, of prices, of rejects and returned containers, but these are dead and uninteresting figures. Why not have the same tabulations by individual companies for the members of the association? Then having the statistics over the years by companies, what is more natural than to watch the growth of your competitors? And then as some competitors forge ahead over the years, why not do something about it both individually and in concert? It apparently is well known in many industries who gangs up on whom as particular individuals forge ahead in the monthly reports. The next step is so logical that it is irresistible; namely, figure the moving five-year aver-

age of the position of each company in the industry and see to it that each operates within a close percentage of its quota for the coming year.

Some highly reputable association counsels have been greatly shocked when we moved in on their quota systems, because their professed ambition was to "stabilize" the industry and bring about "reasonable competition." In 1937 we gave one of the big association engineers a clean bill of health after some interviews but two years later, on complaint, we moved in again and found quota assignments in many industries literally all over the place. This is offered in support of the main thesis that constant vigilance is the price of competition.

The misuse of statistics by trade associations in restraint of trade is only one of a dozen kinds of activity which must be watched regularly to keep them on the straight and narrow path.

Those of you who are familiar with the lumber business know the magic of "grade marking" from Coast to Coast and from the Gulf to the Canadian border which is sponsored by all of the lumber associations. If you have followed our cases you will recall that beginning with this presumably legitimate association activity, many abuses developed, and in some areas a contractor would not get any more grade-marked lumber if the so-called "inspector" found a maverick on the building site.

Special forms of trade association activity are the rate-making conferences which determine railroad rates and the rating bureaus in the insurance business. Time and space do not permit an examination of these price-fixing activities beyond the mere statement of fact that in the case of railroad rates, committees are meeting constantly all over the United States for the purpose of grinding out the grist of rate changes. It is a popular theory that the ICC fixes railroad rates. As a matter of fact, they give special attention to the upper and lower limits of the "zone of reasonableness." Although all rate changes are filed with ICC, they formally approve or disapprove only a small percentage of the rates submitted by the various committees. This situation is now under review in the Federal District at Lincoln, Nebraska, in the *Western Agreements Rate* case.

In the case of fire insurance, representatives of the insurance company meet usually in each state and fix the rates on the buildings in all the cities of the land. On the day before this paper was dictated, namely, December 3, the *Journal of Commerce* of New York contained a list of rate changes for that day covering 148 addresses. If an insurance agent wants to renew a policy on a building at 600 Amsterdam Avenue, he phones the New York Rating Bureau and asks for the rate. The same is true of 94 Houston Street West or 629 Avenue U, Brooklyn, or 43 Vernon Boulevard, Long Island City. The procedure of fixing the insurance rate on a specific address is the result of a great deal of mumbo

jumbo. I have on my desk, for example, a fire insurance rating book of several hundred pages, by means of which rates may be calculated on any structure at any location. This book apparently represents quite a scientific system of rate making but the rates by states in relation to fire losses do not seem to bear out the scientific assumption. Not only the rates but the *loss ratios* (percentage of losses to rates) vary all over the map from state to state, city to city, and from class to class of risks. The ordinary man occupying the buildings across the street will pay the book rate, but the owners of skyscrapers will not. When any risk gets big enough to justify an insurance broker, he takes all the specifications and peddles them around to the various insurance companies and gets a rate that is unbelievably low. As you know, the antitrust indictment against ninety-six insurance companies was stopped by an Act of Congress which permits a moratorium until January, 1948, to give the states additional opportunity in regulating fire insurance rates.

Patents. Monopoly controlled by means of patents is too broad a subject to be discussed in anything more than skeleton form at this time and place. In great ranges of industry the primary use of patents is for purposes of price control. Nearly ten years of antitrust work seem to indicate that such price control methods may be the rule rather than the exception in the patent field. In the case of gypsum board, for example, twenty years ago someone folded the edges of the cardboard over the plaster to keep them from chipping. That was patented and the United States Gypsum Company today, we allege, controls the price of all gypsum board through patents of this simplicity. Incidentally, you would not know the difference between so-called "gypsum lath" and gypsum board if I held the two samples up before you, because substantially there is no difference except the quality of paper on one side; yet the list price over a period of years was $13.00 a thousand for the gypsum lath and $23.00 per thousand for gypsum board. The porous paper back of the so-called gypsum lath takes a finishing coat of plaster, and it must meet the competition of wood and steel lath, whereas the gypsum board with a smooth paper finish on one side may be used as the finished wall. The price differential of $10.00 for these essentially identical products is maintained by patent license agreements among the eight or ten manufacturers, according to the government's allegation in the case.

In one of the government exhibits in the gypsum case there is found this statement by the president of one of the large companies:

> The United States Gypsum Company has been working on a plan to stabilize the gypsum industry and has offered to license the entire industry under the new method of manufacturing gypsum board known as the "bubble system." The licensing agreements submitted to each of the wallboard manufacturers contain price-fixing clauses and under the agreements submitted the prices of wallboard would be fixed for the whole industry for the term of approximately seventeen years.

That, I submit to you, is how it is done.

Most of the patent pools, however, are far too complicated to outline convincingly here. Usually the details pile up into a confusing mass which does not seem to mean anything. In the case of synthetic nitrogen, for example, the operators of one of the new war plants in preparation for offering a bid to the government looked into the patent situation to see what they were running into after the war. At the expense of many thousands of dollars their attorney uncovered approximately 1,800 patents on synthetic nitrogen processes running back through Standard Oil, du Pont, and Allied Chemical to Imperial Chemical Industries of England and on back to I. G. Farben in Germany. Obviously you cannot make any sense out of such a mess as that. The only thing to do is to pay the royalties or face infringement suits.

In the now famous *Hartford-Empire* case in the glass container industry the president of one of the great companies more than a quarter of a century ago wrote in part as follows:

> Working as one unit properly financed and properly organized, this unit owning or controlling the most modern patented automatic machine processes for the various fields of ware—plus such glass formulas, would, within reasonable time, dominate the entire glass industry here in the states as far as manufacturing methods are concerned.

This prophecy came true letter by letter as the record in the *Hartford-Empire* case will show.

There is one other patent case that is quite dramatic in the light of the war. A little insert of tungsten carbide in the cutting edge of a machine tool will slice the hardest steel like butter. Not long ago I watched a machine tool roll off the shavings a quarter inch thick. I said to the operator, "Is that a carbide tip?" He grunted and said, "Of course. What else could do that?" I got the impression that the machine was cutting about a hundred times faster than with a tool of tungsten steel, the next best. Before the war Germany had tungsten carbide and let General Electric sell it. There is a long story of restrictions connected with it, but in round figures when several firms were competing it sold for about $50 a pound on a cost basis of around $25 per pound. When Krupp in Germany and General Electric in the United States got control of patents, the price went up to $450 a pound with a descending cost curve at somewhere around $12 to $15 a pound. After the Department of Justice moved in the price came down to about $40 per pound which still shows a handsome profit. As in several other patent cases, we were lucky in moving in soon after Munich.

Labor and the Antitrust Laws. Ordinary labor union activities are exempt from the antitrust laws. Therefore, there is no occasion to review here the labor problems which make the newspaper headlines. However, there are a number of labor activities in relation to restrictive practices

of producer groups which should be listed in any discussion of the outlook for effective competition. Before the war some jurisdictional strikes and boycotts of employers were believed to be sufficiently restrictive of interstate commerce to justify several antitrust suits, such as the *Hutcheson* case in St. Louis, the *Petrillo Musicians* case in Chicago, and the several electrical workers cases in New York. However, the Supreme Court finally held among other things that the main points at issue were "labor disputes" within the meaning of Section 20 of the Clayton Act and Section 4 of the Norris-LaGuardia Act, and therefore the unions were exempt from antitrust prosecution. In view of this decision, it seems unnecessary to review these cases in detail.

In other cases brought before the war it was alleged that the unions joined with producer groups in price fixing, control of production, and boycotts against competitors. In the San Francisco Bay area, for example (*U. S.* v. *Lumber Products Association, Inc., et al.*), it is alleged that manufacturers of finished lumber and lumber products in agreement with the labor union shut out the shipments of similar products from Oregon and Washington and gave an increase in wages as a *quid pro quo* for higher prices supported by labor boycotts of foreign lumber. The jury returned a verdict of guilty with respect to many of the defendants and fines were assessed totaling $118,000. The Circuit Court of Appeals affirmed the judgment of the lower court. The case is now on appeal to the Supreme Court.

Joint Labor Bargaining. From the point of view of *economic* restraints of trade,[1] the growing practice of joint or group bargaining by the employers in particular industries may become one of the most serious problems to be faced in that borderland between labor and employer agreements. Normally we think of collective bargaining in terms of an agreement between a particular employer and a particular labor union. Gradually the union activity has spread to entire industries so that an industry union bargains as a unit with the several producers of the industry. The next step which has become more and more prevalent in recent years is for the employers in an industry to get together and present a united front against the union whether of the A.F.L. craft type or the C.I.O. industrial type. If this practice should spread over all the principal industries of the country, we might have the spectacle of industry and labor combining against the consumer, because the easy way out of a wage dispute would be to bind all competitors to the same scale and pass the increases on to the consumer. This does not imply that labor should not get increased wages, but if there is no effective opposing force in the form of the financial interest of the employers,

[1] There is no implication in this discussion as to whether these economic restraints may be illegal.

then the checks and balances of the competitive system are eliminated and there is no place to stop.

The group action of trade associations in the labor field covered a large number of companies and many labor groups. There is reason to believe that the practice has grown enormously during the war years. In 1939, a tentative tabulation indicates that about 1,750 employer associations bargained jointly with labor. These represented at least 50,000 member companies employing approximately 1,500,000 workers.

Since that time a number of major industries have taken up the practice but the quantitative statistics are not readily available.

The Antitrust Division has had no cases in this field of joint labor bargaining. Therefore these remarks have no relation to the policy of the Department of Justice in regard to the matter.

The problem is, however, of sufficient importance, in my opinion, to be followed up factually by all students of labor-employer relations, because labor on the one hand and the consumer on the other hand could be whipsawed by the united front of the employers. In some cases wages may be held down by agreement among employers and/or in other cases consumers may be made to pay the price of peace between the two factions.

International Cartels and Agreements. I am not as optimistic about the outlook for effective competition in the fields of international trade, commerce, and communications as I am in the domestic field. International agreements of high and low degree are developing on every hand. Every newspaper has a bewildering array of plans. International shipping has been cartelized for a generation. Now air transport is up for regimentation. International communications by cable, radio, and telephone are likewise being consolidated. Export associations under the Webb Act are taking on a new lease of life, and agreements affecting international commodities are under constant review. These run all the way from wheat to petroleum and from tin to cotton. In stating this as an economic fact, no appraisal of the economic right or wrong is implied of some of the agreements—especially those at the government level.

Types of Agreements. A further examination of the cartel forces back of the newspaper headlines permits a rough classification of the international agreements that are presently current. Beginning at the lower end, these may be classified as:

1. Private cartel agreements typified by international patent agreements, aluminum agreements, the copper agreements between the wars, and the many divisions of Gaul into three parts by the world chemical interests.

2. One stage higher are the international agreements developed privately but sponsored either at the front or back door by the in-

terested governments. Examples of these are the international tin agreements, the rubber, sugar, and coffee agreements.

3. Somewhat offside in the classification are the export association agreements nominally under the Webb-Pomerene Export Act. Examples of these are phosphates, sulphur, flat glass, and occasionally steel and copper.

4. The full flower of international economic cartels is represented by the various commodity agreements negotiated by the interested governments. Among these are the wheat agreement, coffee and tea, with discussions of cotton, meats, rubber, sugar, and other basic commodities. If this last classification somewhat overlaps the second, namely, privately sponsored with a government front, it is because in many cases the wraps have been taken off and full-fledged government responsibility is being assumed.

The decline of competition in the international field for the great basic commodities is so pronounced that an examination of the facts in some detail is justified in a few illustrative cases.

Private Foreign Agreements. My pessimism regarding private international cartels is not deep so far as they affect domestic commerce, because, with the continued support of the Congress, a vigorous enforcement of the antitrust laws can break them up. These cases are only broader and more difficult to handle in the courts than domestic monopolies. It required about five years to win the aluminum suit which had its international angles, about two of which were in the courtroom. The atabrine and tungsten carbide suits based on international restraints were successful. Our timing with respect to the war was quite lucky in both cases. German control over atabrine, the only quinine substitute, was broken about the time of Munich. As a result when the Japanese overran the world sources of quinine, an American-made substitute was soon available in large quantities. The statistical record of the enormous wartime production of atabrine for the armed forces speaks for itself. The subject is not closed, however, because the patent pool was for the duration. What happens to atabrine and quinine after the war will depend in part upon our vigilance.

Tungsten carbide was another victory for somebody. As indicated earlier in this discussion, it sold for $50 a pound soon after it was first introduced several years ago, but when Krupp and General Electric obtained control of the American market through patent agreement the price went up to $450 a pound. Later when the antitrust suit was brought, the price came down to less than $40 per pound. The danger involved in the agreement was not the cost of tungsten carbide but in the fact that American cutting tools were many years behind those of Germany because in peacetimes no one would pay the price for the

carbide as compared with the much less efficient tungsten steel.

To the extent, therefore, that international private agreements restrain the domestic trade in the commodity, they are amenable to the antitrust laws and they need not be discussed in further detail here.

Private Sponsors with a Government Front. In the early days the international tin and tea agreements were made at the private level but gradually the several governments became interested and by the late thirties the agreements had a considerable degree of respectability. In 1940 the world production of tin was about 236,000 long tons. Of this amount nearly 150,000 tons was produced in the Far East—Malaya, Netherlands Indies, and Siam. The remaining tonnage was largely in Bolivia at about 38,000 tons, and Belgian Congo and Nigeria at 25,000 tons. The cost of production was probably lowest in Malaya followed by the Indian Islands and Siam. Next on the upward cost curve would be the African mines and highest of all in unit costs is Bolivia. This cost pattern creates a price problem of the first magnitude. If the world price of tin is high enough to support the Bolivian mines, enormous profits accrue to the low-cost Eastern mines. Available cost estimates run to the effect that some Far Eastern mines have an operating cost as low as $240 per ton as compared with an average world price of tin of about $960 per ton, or four times the low cost. Figuring Far Eastern averages as around $400 a ton, the profits are enormous for the bulk of the world production.

As a matter of fact, in the absence of an international antitrust law, the government front for the International Tin Committee may not be important because a few interrelated groups control the world tin supply. The large Bolivian interests have great slices of the securities of the tin mines in the Far East and of the tin smelters in Europe. Likewise, the English and Dutch tin interests are interlocked with the others in the mines and in the smelters.

As the situation stands now, the United States has a tin refinery with almost 100,000 tons annual capacity which equals the bulk of our tin requirements over the long average, but all of the tin ore is scattered from the Andes to the East Indies; the best of it is exactly a world away from our refinery and practically all of it is controlled by the International Tin Committee. There I leave the statement of fact respecting the tin cartel.

Export Agreements. Under the Webb-Pomerene Export Act, American companies may combine for the purpose of developing the export market. In practice many of the export associations have entered into agreements with foreign producers to divide up world markets and to fix world prices. Whether or not this is legal under the Webb Act remains to be seen. Although the administration of the Webb Act is vested in

the Federal Trade Commission, some of the monopoly angles have been examined by the Antitrust Division from the point of view of the Sherman Act in the pending case against the Alkali Export Association. The principal products of the alkali industry are caustic soda, soda ash, and bicarbonate of soda. Equally important in one branch of the industry is the production of chlorine jointly with alkalis by the electrolysis of salt. These are basic chemical products produced all over the world and, as was to be expected, as soon as the Association was formed and presented a united front in the export field, trouble arose all over the world. In the Far East the Association disputed the market with the British Imperial Chemicals. The Japanese alkali producers were also encountered. In South America both I. G. Farben and Imperial resisted the incursion from North America and in Europe the Belgian Solvay Company held the line against American exports with the co-operation of I. G. Farben and I.C.I. These chronic disturbances in the alkali trade required vigorous measures of control. Threats, boycotts, and complaints by foreign groups against the construction of new American plants were routine measures to suppress competition. I. G. Farben even went so far as to threaten exports to the United States (God save the mark) if the American "bootleg" exports outside the Association were not brought under control.

As a result of these pressures in the alkali markets all over the world, the Association joined with foreign producers in a stabilization program. World markets were allocated and the whole industry frozen into a pattern. Belgian Solvay was given continental Europe; Imperial Chemical, the British Empire with some additions; the American Association, in addition to the United States market, was given Canada, Mexico, the Caribbean Islands, and the remainder of Gaul was split into several parts with the I.C.I. getting the larger percentages, such as 80 per cent in China, 75 per cent in Brazil, and 65 per cent in other South American countries. Technically, the Alkali Export Association is not supposed to have any effect on the domestic industry under the provisions of the law. As a matter of fact, exports were excluded and domestic prices were stabilized under the agreement.

I leave the question with you as to the effects of Webb export associations on competition in international trade. One school of thought maintains that the associations are necessary to fight fire with fire and that with cartelization abroad the only way for American producers to get a fair share of world markets is to present a unified front. Another school of thought holds that the Webb associations are the handmaidens of cartels and that where foreign industries are cartelized, the Webb association is a ready-made organization to be taken into the

international cartel as a full-grown member in good standing for the division of world markets and international price fixing. I am inclined to agree with this last point of view and although Webb associations may be desirable in promoting our foreign trade, the outlook for the competitive system across national boundaries is not bright in this field of cartelization.

International Commodity Agreements. Time and space do not permit more than a reference to a few international commodity agreements, such as coffee, sugar, tea, wheat, and rubber.

The coffee agreement is an example of a fully approved agreement at the government level.

The United States consumes about 50 per cent of the world's exportable surplus of coffee, and Brazil exports 50 per cent of the world's total. Therefore, these two countries are at the opposite ends of the balancing mechanism. Under the agreement, quotas are fixed for the important producing countries. The original quota of October, 1940, was 15,900,000 60-kilo bags, practically all of which was assigned to the signatory countries. Of this amount, Brazil received a quota of 9,300,000 bags, Colombia 3,150,000 bags, and the 3,000,000 bags were scattered among twelve other Latin-American countries. During the war these quotas were shifted from time to time. This is a fully legal agreement, Congress having approved participation by the United States in a joint resolution on April 11, 1941.

There has been an international tea agreement for many years sponsored primarily by the planters in the Far East. It covers approximately 80 per cent of the world's export supply of tea and affects about 75 per cent of the tea imported into the United States. The tea agreement began by the planters of the Far East getting together and ended by the government taking over. Among the early reports of the International Tea Committee is the statement that the control scheme has yielded valuable experience:

> In the first place, it has confirmed that adversity is a wonderful stimulant to agreements, in regard to the establishing of a control scheme of this kind. . . . The strength of the scheme, however, has been due to the fact that it was initiated by the producers and this demonstrates an important point which ought to be considered in all schemes of control; namely, that there is a better chance of success where the ideas of control are conceived by the industry itself and are not imposed by government.

Arguments were made to the effect that it is impossible to give the consumers representation on the control committee because "the distributing trade in the various regions as buyers are much too individualistic and competitive."

The committee then yields a point by agreeing to have representation of consuming countries at the government level rather than at the

billions of barrels even though only a well here and there has tested the

private level. Later the interested countries take over and the government appoints the representatives on the committee of the producing countries.

There was an international wheat agreement in 1933 "to adjust the supply of wheat to effective world demand and eliminate the abnormal surpluses which have been depressing the wheat market and to bring about a rise and stabilization of prices at a level remunerative to the farmers and fairer to the consumers of breadstuffs." Under this agreement, export markets were allotted among Argentina, Australia, Canada, and the United States. A second agreement was concluded in 1942, and stocks and exports were to be brought under still tighter control. The International Wheat Council estimated the world export surplus and assigned it on a percentage basis to the four countries named above. Argentina got 25 per cent; Australia 19 per cent; Canada 40 per cent; and the United States 16 per cent. Stocks in the various countries were limited to both a minimum and a maximum. Prices were also fixed on a basic minimum and a basic maximum both f.o.b. and c.i.f. and adjustments were provided for fluctuations in rates of exchange. The wheat agreement is still in nominal effect in spite of the war and the controls promise to be tighter as economic peace approaches.

I have no occasion to discuss the petroleum treaty now before the Senate, but the control of world petroleum reserves back of the treaty is a matter of great importance. Prior to the war, the United States was the world's great source of petroleum, both with respect to actual production and the estimated reserves. I shall not burden you with the production statistics but the reserve figures in round numbers are interesting. World petroleum reserves about 1940 were estimated to be in the neighborhood of 50,000,000,000 barrels, of which the United States had about 20,000,000,000 barrels or about half, Russia 6,000,000,000 barrels, with the next highest at about 5,600,000,000 barrels in Venezuela. The great basin of the Persian Gulf was a question mark in the public print, although a few oil companies were keeping their own guesses to themselves. Then came the great demand for petroleum during the war and the Persian Gulf began to catch the headlines. At first the reserve guess was about 17,000,000,000 barrels, then it was put up to 27,000,000,000, then 50,000,000,000, and finally by reputable geologists a guess of 100,000,000,000 got into print. These estimates, however inaccurate, probably mean that the world balance of petroleum has shifted from the United States to the Persian Basin.

There is no occasion for worry about the domestic supply of petroleum, in terms of the absolute, but in terms of the economics of cost and price, another story is in the making. All over the Persian Basin in Iran, Iraq, the islands bordering the sea, in Saudi Arabia, and the little principalities of Kuwait and Qatar, the reserve figures run in terms of

billions of barrels even though only a well here and there has tested the sands. When the projected pipe lines are built to the Eastern Mediterranean of which there will be half a dozen a foot in diameter or more, the oil will spout into the tankers for world distribution. It will stop on the way in France, Italy, and England, especially at Liverpool, and then perhaps it will spread up and down the American seaboard. What happens to Venezuela and the oil fields of the United States is a question of the arithmetic of cost and price on the one hand as against restrictive control on the other.

Laying aside the question of the treaty, I hasten to add that the calamity facing the American oil fields by a flood of Persian oil is not as imminent as superficial figures would seem to indicate. This is so because half a dozen great oil companies control the world's supply of petroleum outside of Russia. I think that statement is worth repeating for emphasis. A half dozen companies own the world's petroleum supply and they are interlocked in practically every great field. In Venezuela, for example, the Royal Dutch Shell, the Gulf Oil Company, and the Standard Oil Company of New Jersey are in a definite percentage partnership for a large proportion of the production and reserves. In Iran the Anglo-Iranian Company has all of the fields, but the Anglo-Iranian is in partnership all over the world with many of the other oil companies. In Iraq, for example, Anglo has 23.75 per cent; Royal Dutch 23.75 per cent; and Socony-Vacuum and Standard of New Jersey another 23.75 per cent between them. Note the accurate percentages of joint ownership. French oil interests have another 23.75 per cent and a local Persian capitalist, the remaining 5 per cent .In Kuwait, Anglo-Iranian and Gulf own reserves on a fifty-fifty basis estimated at about 10 billion barrels. In Saudi Arabia and Bahrein Island, Standard of California and the Texas Company own the concessions on a fifty-fifty basis.

With the interlocking controls indicated by these precise percentages and with the heavy representation of American companies, I do not look for a flood of Persian oil on the American markets, treaty or no treaty. Again referring to the text, the outlook for effective competition in the international petroleum industry is not bright.

International Trade and Communications. Other international industrial arrangements at the government level are of great importance to the American economy. Among these are international air transport arrangements,[2] instantaneous international communications, and the proposed petroleum treaty now before the Senate.

[2] A straw in the wind is the report that about November 1 the English Government announced that all civil aviation of England is to be put in the hands of a corporation wholly owned by the Treasury and that the English Government also intends to purchase the whole of the capital stock of Cable and Wireless, Ltd., which owns and operates the British network of overseas communications. The communications properties will then be partly resold to the Dominion and Indian Governments.

The question of air transport is too big to be reviewed here. A more manageable subject involving about the same problems is the pending proposal before Congress to consolidate into one corporation in the United States all the overseas instantaneous communication; namely, cable companies, the overseas radio, and overseas telephone facilities. The arguments in favor of the consolidation are, among others, that the cable companies and some radio connections will be saved from extinction by the merger. This salvation is proposed on the assumption that cable connections are necessary for national defense and for continuous and confidential commercial operations. Another argument is that the radio wave lengths for overseas connections are scarce and that these would be economized by assigning them to one rather than half a dozen competing companies. The major argument, however, runs to the effect that we need to fight fire with fire—that foreign radio and cables are consolidated and in most cases are operated directly or supported by the government. Therefore, a strong, unified American company is necessary in order that we may demand and obtain a fair percentage of the tolls.

The basic argument against the merger is handicapped by its lack of technicalities and therefore of scientific appearance. It rests on the elementary proposition that historically monopolies are a blight and that the surest way of killing progress is to merge the competing interests. A slightly more professional argument runs to the effect that if the cable companies cannot survive competitively, the merged companies will not support them. It would be bad business to throw good money after bad if the cables are not self-supporting.

As to the scarcity of wave lengths, the layman is quickly snowed under with the frequency tables put out by the Communications Commission. It is a statistical fact, however, that when the Army and Navy release their frequencies pre-empted during the war, the scarcity for private use will be greatly relieved.

Obviously these pressures of consolidation of air transport and overseas communications are not sinister with respect to their proponents, but they do represent a genuine cleavage between the monopoly and competitive principles in international commerce. Coming back to the tone of the discussion, the outlook for effective competition is not hopeful in these fields in the light of the present drift.

Conclusions. In the field of domestic trade and commerce there is a chance that competition will win out if supported by American businessmen who believe in competition and if the game is policed by a vigorous enforcement of the antitrust laws. In many of the great fields of international trade and commerce, however, the outlook for effective competition is dim, first, because for fifty years foreign businessmen have

been cartelizing industry with the encouragements of their governments, and, second, because there is no international antitrust law. The indications are that unless one or more of the powerful nations set their faces against the trend, the great bulk of world trade and commerce, including communications, will be organized in a monopoly pattern beginning with numerous restrictive agreements at the government level and extending on down to the secret agreements similar to those prevailing in the international chemical and metal industries between the wars. To revert to the text, the outlook for effective competition, in my opinion, stops at the boundaries of the United States if the present international drift continues.

AN APPRAISAL OF THE ANTITRUST LAWS[1]

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I

The broad objective of the American antitrust laws is to eliminate monopolies and collusive restraints upon trade wherever such devices do not have explicit sanction from public authority. This purpose has deep roots in the development of English common law. The law against collusion can be traced back to a common law which condemned excessive restraints in private contracts. The law against monopoly runs back to statutory restrictions upon grants of monopoly by the British crown. Both traditions are older than and different from the economic tradition in support of competition among businessmen; and although the competitive tradition in economics has influenced the later development of legal concepts, it is not indispensable to them.

The laws against collusion and monopoly rest upon grounds both simpler and broader than those of competitive economic theory. The law against collusion strikes at co-operative activities which directly undertake to limit the productivity of industry or to establish one-sided power in making industrial bargains. No general theory of competition is required to support the view that if antiproductive and exploitative arrangements can be identified they should be regarded as contrary to public policy. The law against private monopoly rests upon the view that unchecked private power will ordinarily be used to bring about restriction of output and exploitation, but in striking at extreme departures from competition it does not necessarily presuppose an atomized competition in the market such as was long envisaged in competitive economic theory. The grounds for the laws against collusion and monopoly include not only a dislike of restriction of output and of one-sided bargaining power, but also a desire to prevent excessive concentration of wealth and power and a desire to keep open the channels of opportunity.

The broad purposes of the antitrust laws are indispensable parts of public policy. Though not derived from economics, they are consistent with the thinking of economists. Economists of all persuasions agree that maintenance of high levels of consumption, production, and employment should be a major objective of an economic system. Direct attack upon programs designed to reduce consumption or limit production and thereby limit employment is wholly in keeping with such

[1] This paper is based upon a memorandum about antitrust policy which the author is preparing for the Committee for Economic Development.

an objective. Similarly, economists generally agree that shares in the product of industry should be apportioned as a reward for productivity and as an incentive to produce, and that incomes which cannot be justified in such terms are likely to be unjustifiable. Such an opinion leads readily to condemnation of devices by which income is enhanced by monopoly power or by measures deliberately designed to create scarcity rather than to reduce scarcity.

Thus the purposes of the antitrust laws are almost platitudinous. Doubt has been thrown upon them in recent years, not because these platitudes are now denied, but largely because of a mistaken view that the antitrust laws pretend to be a complete public policy rather than merely a part of one. Obviously the elimination of private monopolies and of collusive restrictions may be insufficient to keep output at high levels. Obviously the destruction of opportunities to make profits from such arrangements is not enough to establish productivity as the sole basis of income. Full productivity and distributive justice call for positive as well as preventative measures.

An earlier generation of economists, which relied heavily upon the free play of competitive forces in the market to provide positive results, was capable of regarding the antitrust laws as the principal, if not the sole, appropriate type of public regulation of business. But the usefulness of the laws in their proper preventative function did not depend upon the assumed sufficiency of competition to do the rest. A later generation of economists emphasizes the need for a wide variety of public controls in order to make the economic system prosperous, secure, and just. This new view of the positive program does not destroy the need for means to prevent its deliberate sabotage. Thus the antitrust laws are appropriate parts of widely different economic philosophies. They fit equally well into the economics of competition and the economics of control. In a competitive economy their function is to maintain the vitality of the competitive forces. In a controlled economy their function is to prevent restrictions and monopolies which are inconsistent with the public purposes expressed in the control. In a mixed economy such as our own they are called upon to perform both of these functions, leaving the battle between competition and control to be fought out without the stultifying hindrance of restrictive devices which serve the purposes of neither program.

But the antitrust policy has been challenged in recent years, not merely from the mistaken opinion that it is identical with a reliance upon competition in economic affairs, but also from the opinion that this policy is inconsistent with specific constructive programs intended to stabilize the economy, to maintain the solvency of economic groups, and to achieve the advantages of co-operative action. Price fixing within

reasonable limits has been advocated as a device for stabilizing price levels and thus avoiding depressions. Collusive restrictions have been proposed as devices by which extremes of competitive pressure can be averted from threatened groups and these groups can be saved from bankruptcy. Much has been said about the economy and efficiency which can be achieved by joint action in conducting research, providing delivery service, and performing various other economic functions.

Such arguments against the antitrust policy are, for the most part, insubstantial. Neither analysis nor experience supports the view that stable price levels can be achieved by allowing unco-ordinated groups of businessmen to agree privately upon price-maintaining devices and to make these devices effective so far as they are severally able to do so. The unbalance and fluctuation of a price structure run upon this principle would probably be at least as great as that in our present economy. For this reason, it is not necessary to consider whether stabilization of the price level is the best road toward stabilization of consumption, production, and employment, even though obvious objections can be offered against such an opinion.

Similarly, the argument for collusion as a remedy for undue economic pressure breaks down upon analysis. An economy based upon private enterprise rests as much upon the law of bankruptcy as upon the pursuit of profits. The possibility of bankruptcy is a part of business incentive and is a major requisite of the reapportionment of economic resources which have been badly allocated. To diminish competitive pressures so that they do not cause bankruptcy would be reasonable only if we were prepared to provide other devices to serve the purposes which bankruptcy now serves. Probably it would be necessary to license those who enter a business and to control their performance thereafter. A public authority conceivably might set limits to price fluctuations and to other forms of competitive pressure as a part of some such general policy of control, but businessmen cannot properly be left free to set these limits for themselves without accepting further controls. Such a policy would be inconsistent with theories of competition and control alike. In practice, moreover, a business group which enjoyed the right to adopt collusive programs in order to resist extreme competitive pressures would be likely to see such pressures constantly on the horizon, and to eliminate not only extremes of competition but all inconvenient competition.

The argument for this type of protection of the business interest is most persuasive where the businessmen are many and small. In such cases ill fortune in business is likely to be translated directly into family and personal poverty. What has been said implies no attack upon policies of minimum wages, annual wages, unemployment relief, family allowances, or other devices to maintain a minimum level of living for

all persons in the community. Neither is it intended to deny that measures to support the prices of goods sold by self-employed petty producers may be convenient ways of safequarding the individual lives of such persons. The contention is merely that any such programs call for explicit public sanction and control and that the antitrust laws are still needed to prevent unauthorized and unregulated ventures of this type.

The argument that the antitrust laws prevent desirable forms of efficient co-operation is usually based upon a simple misunderstanding. Joint action by businessmen is not inherently illegal. It becomes so only when it entails an unreasonable restraint of trade. Co-operative action in research and in the provision of joint services is a commonplace under the antitrust laws. It raises no problem where there is no restraint. There are, however, certain cases in which the effect of a program of joint action is not clear, and others in which harmless or useful types of joint action have been combined with unreasonably restrictive activities. It is necessary to use the antitrust laws in the latter type of case and it is inevitable that differences of interpretation will be encountered in the former type. Neither borderline cases nor cases in which restrictive elements must be eliminated from useful programs need interpose any major obstacle to the further development of nonrestrictive programs of joint action.

II

Taking for granted the broad purposes of the antitrust laws, let us now consider whether these purposes have been translated into an adequate structure of substantive law.

The portion of the law which deals with collusion has been well worked out and is reasonably clear and effective. It has been developed case by case through judicial interpretation of broad statutory enactments. There is a very substantial group of collusive activities which are now generally understood to be violations of law, and this group includes substantially all of the most direct and effective types of restriction. Below is a list of varieties of agreement which are regarded as typically illegal. Needless to say, it has no official sanction.

I. *Exclusion of competitors from the market.*

1. Agreement to deprive competitors of access to credit, materials, labor, transportation, or markets. Such efforts may apply to:
   a) Competitors from outside the locality.
   b) Competitors who are not members of an association or recognized group.
   c) Competitors who recondition used equipment, make prefabricated goods or improved or simplified models, or the like.
2. Agreement to limit the number of concerns which may engage in a designated business.

3. Agreement not to use specified channels of distribution, or to make exclusive use of certain designated channels.
4. Agreement to undertake local price cutting designed to destroy competition.
5. Agreement to exact discriminatory prices or terms which prevent or destroy competition.
6. Agreement to make exclusive or preferential dealing arrangements, designed to impair access by competitors to the market—eligibility lists.
7. Agreement to require the purchase of certain goods or services as a condition of supplying others.
8. Discriminatory patent pools designed to destroy nonparticipants.

II. *Private restriction of output.*
1. Agreement to restrict production or sale.
2. Agreement not to construct or acquire new equipment.
3. Agreement not to use new processes.
4. Agreement to shut down or destroy existing equipment, or to acquire equipment of competitors for that purpose.
5. Agreement not to produce low-cost products.
6. Agreement to limit services rendered.

III. *Private agreement to divide the market.*
1. Allocation of territories in which to sell or purchase.
2. Allocation of customers.
3. Rotation of bids or orders.
4. Agreement on amounts to be produced or sold.
5. Agreement on proportion of total sales or purchases to be made by each concern.
6. Agreement not to sell to each other's customers.
7. Allocation of products to be made or sold or processes to be used.

IV. *Private price fixing.*
1. Agreement upon selling prices or bids.
2. Agreement upon and enforcement of resale prices (except as specifically exempted by law).
3. Agreement upon purchase prices to be paid.
4. Agreement to fix price differentials, discounts, or terms of sale, or to designate groups of customers who shall be eligible for discounts.
5. Agreement to add arbitrary charges to sale prices or to make arbitrary deductions from purchase prices.

V. *Coercion.*

Agreement to use boycotts and other coercive devices to further any of the foregoing restraints.

Critics of the antitrust laws often assert that the law of collusion is highly uncertain. In any law which develops by judicial interpretation there will be minor inconsistencies and uncertainties. But beyond these, a measure of uncertainty is indeed inevitable in the present statute; for what the law condemns is any arrangement which unreasonably restrains trade, regardless of the specific devices through which the restraint is brought about. As business methods change and new types of joint action are developed, a borderline group of problems not yet settled is constantly enlarged through business experiment while it is being reduced by judicial decision. Furthermore, business enterprises which desire to restrain trade will usually eschew those practices which are clearly illegal and will endeavor to give their restraints an innocent appearance. Thus the operative fact of price fixing may be illegal beyond question, but the evidentiary facts which show that there is a price-fixing conspiracy may be as ambiguous as planning can make them. Active prosecution of antitrust cases lessens the gap between the established judicial interpretations and the latest inventions of the collusively minded, but some gap will remain so long as business evolves and lawbreakers are ingenious.

Though the law of collusion is reasonably clear, it has not succeeded in stamping out collusive activities. After more than half a century, the Antitrust Division still uncovers far more indications of collusive arrangements than it feels able to prosecute. In many industries the same types of collusion recur again and again, and often with many of the same participants.

Nevertheless, this portion of the antitrust laws has had a substantial salutary effect, which becomes evident when American business is compared with business in other commercial countries. Through the antitrust laws collusive action in the United States has been forced underground. In consequence, it has been more cautious, less prevalent, weaker, less sustained, and less effective than corresponding types of action appear to be in countries which have no antitrust policy. This assertion cannot be proved by quantitative comparisons; for in the nature of the case the scope and effectiveness of collusion in the United States remain partly unknown. However, it is obvious that collusive groups here do not have the opportunity to impose discipline which has characterized European cartels. The evidence in international cartel cases includes various instances in which American businessmen insisted upon weaker and more roundabout restrictions than were desired by their European colleagues and gave the antitrust laws as excuse for their caution. In particular industries where comparisons between European and American producers are possible, European prices have been kept

higher, European quality has lagged, and European technical progress has been retarded.[2]

III

The law of monopoly is much less satisfactory, both in its substance and in its effect. The courts have vacillated in determining the meaning of monopoly, so that to this day we have no clear adjudication about the relative importance of size and conduct in determining whether or not an illegal monopoly exists. Decisions that mere size is no offense may be placed side by side with decisions in which the possession of monopoly power is regarded as decisive, whether or not that power has yet been unreasonably used. In practice, a prosecution on the charge of monopoly always proceeds on the assumption that, however complete may be the defendant's occupancy of the market, objectionable behavior should also be proved.

The law has developed only a limited conception of the nature of objectionable monopolistic behavior. A variety of devices to exclude competition from the market have been identified and condemned—local price cutting, pre-emption of necessary facilities, price discrimination, use of tying contracts, and the like. However, there has been no equivalent development of law concerning conduct designed to exploit a monopoly position. Substantially nothing has been done to identify monopolistic restriction of output, monopolistic price policy, monopolistic slowing up of technological progress, or monopolistic impairment of the quality of products. Obviously such characteristics would be hard to define in terms which would distinguish clearly between the practices of monopolies and practices prevalent throughout business; and obviously proof of such matters would be inherently hard to obtain. Lacking concepts of this kind, however, the law is more sensitive to the character of efforts to create a monopoly than it is to the activities of a monopoly once created.

Moreover, the law has been developed around the problem of monopoly in a single industry. It is concerned with the type of size and power which is attained as a concern becomes more nearly the sole producer of some related group of commodities. It does not cover certain other problems of size which may be of even greater importance. A concern may be large in total assets through its place in a variety of industries and yet may not have a preponderant position in most of the industries occupied. Financial strength and omnipresence mean power. Such a business giant may be able to overwhelm its lesser rivals through its political influence, its banking connections, its acquisition of strategic facilities, its ability to undertake interminable litigation, and its

[2] For example, compare European and American prices upon electric lamp bulbs, radio sets, and steel.

ability to lose large amounts of money in any chosen one of its diverse activities. The problem of size in the United States is at least as much a problem of du Pont and the General Electric Company, as it is that of the Aluminum Corporation of America. Nevertheless, the law can cope with such structures only if it can find in them evidence that some particular line of commerce has been monopolized, or is about to be monopolized.

Similarly, the law cannot be easily focused upon problems which arise from the integration of successive stages of an industrial process. Apart from any monopolistic problems which may spring from the horizontal size of the concern, integration produces a vertical problem wherever the integrated enterprise is not wholly self-contained. If the concern sells a part of what it makes or buys a part of what it uses, it finds itself in competition with its own customers or its own suppliers. Such cases give rise to problems which have not yet been handled successfully under the antitrust laws, although some efforts are now being made to interpret the laws so that these relationships are covered. For example, a chain store which produces groceries for sale under its private brand is likely also to be a distributor of competing nationally branded grocery products. In the controversy which has raged about chain store practices, there have been frequent charges that relationships of this kind have been used to injure independent manufacturers by discriminating against them in distributive service or to injure independent distributors by using the national brands as loss leaders. It is not yet certain whether such activities can be dealt with at all under the antitrust laws; but it appears that, if so, they can be attacked only as a part of a charge that a chain is achieving a monopoly or else on the ground that the practices themselves constitute unfair methods of competition and therefore are illegal, even when they appear on a petty scale and without the significance which size appears to give them in the grocery field.

Similarly, the antitrust laws do not focus sharply upon certain special problems associated with the size of large buyers of goods. Buyers who are in a position to make their own supplies or to take the entire output of a single seller have an advantage in the market as compared with other buyers. This advantage does not depend upon their enjoyment of a monopoly in either buying or selling. Thus it appears to lie outside the scope of the present antitrust laws.

Another major gap in the present law consists in the lack of adequate measures to prevent the development of a trend toward monopoly. The Sherman Act prohibits attempts to monopolize, but this prohibition takes effect only when a concern is so near a monopoly that intent and imminent effect are evident. The Clayton Act attempted to provide

safeguards at an earlier stage by prohibiting the union of competing corporations through acquisition of stock where the effect would be substantially to lessen competition between the concerns thus united. Had this provision been interpreted in accord with the meaning it holds to a layman, any use of the holding company device to acquire substantial amounts of voting stock in competing concerns would have been clearly illegal, and so likewise would have been any concern's acquisition of a substantial amount of the voting stock of a competitor. However, even thus interpreted, the law would not have been sufficient to its apparent purpose, for it contains nothing to prevent competitors from being united by merger, even though the effect is identical with that which must not be brought about by stock acquisition. The immediate effect of the law was to encourage use of the merger instead of the holding company device. Later, after the courts had narrowed the prohibition in various ways, there was no adequate barrier even against stock acquisitions. Thus the entire effort to prevent reduction of competition by the union of competitors has become a dead letter. The law cannot intervene until the process has gone so far that monopoly is imminent.

An additional gap in the law concerning size is its failure to reach communities of interest. The Clayton Act prohibits interlocking directorates among concerns which have assets of more than one million dollars. With this single exception, however, there is no provision against the development of a working accord among business enterprises through the personal relations of their officers, managers, and principal stockholders. The provision about interlocking directorates has little meaning, since the same business interests can be represented in the directorates of competing corporations through the simple device of placing on the various directorates different persons who are partners in the same law firm, officers of the same corporation, or members of the same family. Though competing concerns may not have identical directors, nothing in the law prevents them from having identical executive officers, lawyers, accountants, banks, and advertising agencies. There is no effective legal barrier to prevent a single wealthy man from owning the controlling stock interest in more than one ostensibly competing company. Still less is there any obstacle to the exercise of stock control in competing corporations by different members of the same family. In summary, there has been no substantial effort to prevent competition from being destroyed by ties of ownership and management which unite ostensibly independent concerns. These gaps in the law have made it easy for many industries to fall into the hands of a few large corporations or communities of interest, a condition which makes collusion easier to achieve and harder to detect and which sometimes pro-

duces the quasi-monopolistic policies known to economists as price leadership and oligopoly.

The inadequacies of the substantive law have discouraged vigorous efforts to prosecute American large enterprises on charges of monopoly; and in turn the fewness of the prosecutions has contributed to the uncertainty of the law and has deprived the community of the dramatic conflict out of which pressure for amendment of laws is likely to grow. Under the antitrust policy the concentration of industry in fewer corporate units and the interconnection of corporations by lines of control have continued. The giant enterprise of today is of a size not contemplated at the turn of the century. A reduction in the number of concerns has been characteristic of most manufacturing industries and of many extractive ones. The scale of business organization has grown more rapidly than the size of industrial plants; advantages in organization and in bargaining, rather than in technology, have been the determinants of size. Certain corporations have been dissolved—the Standard Oil Company, the American Tobacco Company, and others. Certain mergers and expansions doubtless have been prevented. Nevertheless, American business enterprises have attained a size and concentrated power which is unmatched in the other industrial countries of the Western world.

The relative success of the law of collusion has contributed to this result. As has been frequently pointed out, enterprises of the United States have accomplished by fusion what they might have accomplished in certain other countries by restrictive agreement. The tendency has been to use business combination as a substitute for collusion. This type of development has been facilitated, of course, by the breadth of the American market, the relative absence of governmental and conventional restrictions upon industrial change, and many other characteristics of the American economy. It is reasonable to suppose that in turning to the corporate combine American enterprises have often achieved restraints which are tighter and more enduring than those which they might have attained through collusion. It is equally reasonable to believe that the development of big business has produced novelties in industrial management, technological development, and even in price policy addressed to mass markets, which contain possibilities of usefulness greater than anything that might have been developed through mere restrictive agreements. It is beyond the scope of this paper to explore the degree of truth which lies in these and other similar generalizations.

IV

Congress has repeatedly exempted particular industries or activities from the antitrust laws. There are exemptions of varying extent for rail,

water, truck, and air transportation, banking, insurance, agricultural marketing and processing, labor organizations, co-operative organizations, export trade, and resale price maintenance. In many instances the exemptions have been incident to the establishment of public control over the exempted area, and administrative surveillance by the controlling agency is relied upon as a protection against unreasonably restrictive activities. Consideration of the propriety of such exemptions from the antitrust laws would necessarily require formulation of a philosophy about the appropriate scope and character of public control and about the wisdom of resort to restrictive measures by public agencies. No such ambitious appraisal will be attempted here.

However, some exemptions from the antitrust laws are unsatisfactory regardless of one's philosophy of public control. These are cases in which private groups are allowed to engage in restrictive practices with no effective public supervision and for no plausible public purpose. In some instances such a situation has arisen through a flagrant concession to special interests; in others it is due to an inadequate delimitation of the boundaries of public control, with the result that private restrictions have arisen in a no man's land not clearly subject either to the antitrust laws or to the administrative authority which has jurisdiction over the exempted area. Such cases may be regarded as defects in the application of the antitrust policy itself, since they involve private restraints without effective public sanction and control.

The exemptions which have to do with transportation agencies contain such no man's lands. The laws about railroads, which are the oldest and most fully developed, still contain gaps, particularly in not providing specific authorization and specific safeguards for joint action by carriers to co-ordinate rates. In the absence of legislation on the subject, a co-ordinating process has been undertaken by privately organized rate bureaus, which are charged, in prosecutions now pending, with various substantial abuses of their usurped powers. The laws concerning trucking, though recent, were modeled on the railway legislation and contain the same gaps. The laws concerning aviation appear to be better thought out, but the problem is so new that appraisals must necessarily be tentative. The laws concerning shipping are the most obviously unsatisfactory of this group. They specifically authorize private shipping companies to fix rates jointly by conference, but they limit governmental review to the function of preventing discrimination in rates. With the jurisdiction of the antitrust laws thus destroyed, neither competition nor any public agency now has the function of preventing rates from being unduly high.

Exemptions which cover agricultural marketing pretend to establish public control but in fact sanction uncontrolled private restrictions. De-

veloped during the thirties, they express the same point of view which produced the National Industrial Recovery Act and other experiments with price fixing through various forms of private so-called "self-government." The Secretary of Agriculture is given the power to approve marketing agreements among growers, handlers, and processors of agricultural products, and agreements thus approved are exempt from the antitrust laws. If the Secretary chooses to convert an agreement into an order, he can make it binding upon minority groups of sellers who are unwilling to observe it. The purposes and standards to which agreements are to conform are expressed in vague language, and the administrative machinery through which agreements are to be developed places initiative in the hands of groups of sellers and contains no provision for representation of the buyers' interest. The Secretary is given no adequate basis for determining the effects of the agreements nor for preventing abuses in their administration. Thus the agreements have become devices by which restrictions similar to those ordinarily forbidden by the antitrust laws are used to improve the incomes of groups of sellers at the expense of buyers, and sometimes to the disadvantage of minority groups of sellers. The importance of this ill-safeguarded exemption is enhanced by the fact that its benefits are available not only to farmers, for whom the statute was presumably enacted, but also to processors of agricultural products, many of whom are large and powerful corporate enterprises.

An exemption for labor has been written into the antitrust laws in a series of steps culminating in the Supreme Court's decision in the *Hutchison* case. The Congress has recognized a substantial distinction between the price bargain and the wage bargain and has accepted the principle of collective bargaining with reference to the latter. The logic of this distinction is evident in the fact that in a healthy economy prices are expected to go progressively lower, but wages progressively higher. There is no need to question the present exemption insofar as it authorizes collective bargaining and prevents the use of the antitrust laws against the strike and related tactics used in labor disputes. Although many questions of public policy arise concerning the conduct of labor organizations, the issues which they raise are not those of the antitrust laws, and any public control which is appropriate should be exercised through other instruments.

In the *Hutchison* case, however, the exemption of labor was made to depend not upon the nature of the activities of labor groups but upon the fact that these groups represented labor. The Court announced that labor is exempt from the laws when it acts alone, regardless of the character of its action. Under this principle, a labor group acting alone may be presumed to enjoy the right to fix prices upon ordinary

commodities and to interfere with commercial competition in ways identical with those forbidden to business groups. Thus the exemption amounts to a special privilege to labor to organize business restraints where any labor advantage can be seen in doing so. It entails the danger that labor unions will restrict production and maintain prices in particular industries in the hope of getting some share in the enhanced income derived from such practices. The exemption is an anomaly in the law, and could easily be done away with.

Another important exemption from the antitrust laws covers resale price maintenance contracts when they have been made lawful under state laws in the states in which the resale is to take place. In theory, this exemption merely recognizes that the states have an overriding interest in transactions the impact of which is primarily local, and therefore gives effect to state policy. In practice, however, the state laws were hastily enacted with inadequate consideration under the pressure of highly organized lobbies expressing the interest of groups of distributors who desired to avoid price competition. These state statutes contain a unique feature: provision that the terms of a private resale price contract shall become binding upon persons who have never agreed to that contract when such persons are placed on notice of its existence. The federal exemption is so written that it appears merely to authorize voluntary agreements fixing resale prices. Indeed, it specifically forbids horizontal as distinguished from vertical agreements. However, the compulsory features of the state laws give many resale price agreements a horizontal effect and thereby make the consequences of the federal exemption much more serious than appears on the face of the statute. Ambiguities and inconsistencies in the legal structure afford some doubt as to what would be the final scope of the exemption if all uncertain issues were to be litigated; but in practice the exemption has been taken as authorization for distributors to insist that manufacturers issue resale price contracts and for the coercive features of the laws to bring about uniformity in the prices of all distributors on the same goods and a tendency toward uniformity in the prices fixed by ostensibly competing manufacturers.

This exemption is defended on the substantive ground that it is necessary to prevent the cutthroat pricing practice of large chain stores, particularly in the drug and grocery trades. In practice, of course, it does much more than attack extreme forms of price competition. It provides a means for destroying price competition among distributors and impairing it among manufacturers. Whatever need there may be to curb predatory price cutting by large distributors could be met by more modest legislation; and whatever controls are imposed should not take the form of allowing small groups of private persons to fix prices through-

out the market without public review. Laxity in the policy of state governments—most of which have no administrative mechanism designed to support the philosophy of the antitrust laws—is no excuse for similar laxity in interstate commerce on the part of the federal government.

The problem which arises with reference to certain other exemptions cannot be discussed here. Their scope is not yet certain and an adequate discussion of the various possibilities would take too long. Briefly, the antitrust laws include an exemption for joint action by American exporters, the significance of which will be uncertain until cases now in the courts are decided. If the courts sustain the interpretation of the law which has been urged by the Department of Justice, the exemption works no injury to the enforcement of the antitrust laws in the United States, although there may be some reason to abandon the exemption as a part of an intergovernmental program to reduce international restraints of trade. If the contentions of the defense should be sustained, however, the law might permit American enterprises to participate in international cartels under only nominal supervision by a governmental commission.

Similarly, the significance of the exemption afforded by the patent law is not yet wholly clear. As a monopoly of a particular technological development, limited to a period of seventeen years, an individual patent need not destroy competition in the industry to which it applies. Great aggregations of patents, through which an industry-wide control is maintained for periods much longer than the life of a single patent, may become devices to monopolize industries as well as bits of technology. Until prosecutions, present and prospective, have defined the boundaries of the patent power, many of which are now uncertain, it is impossible to say how extensively the monopolistic arrangements which depend upon patents are based upon an exemption from rather than a violation of the antitrust laws. There is reason to believe, however, that patent reform is an important part of any program designed to make the antitrust policy more effective.

Finally, the exemption recently given to insurance companies appears likely to weaken the antitrust policy. During many years in which the courts held that insurance was not covered by the antitrust laws because it was not a part of commerce, state regulation of insurance companies became general. Recently the Supreme Court held that insurance is subject to the antitrust laws. On the theory that federal enforcement of the antitrust laws is inconsistent with continuance of state regulation of insurance, the Congress has provided a short-term exemption during which the states may enact laws to prevent monopolistic restraints and has withdrawn the application of the federal law wherever such state

laws are enacted. The obvious interstate character of the insurance business and of restraints affecting it, the notorious ineffectiveness of state antitrust legislation, and the inherent difficulties of determining whether or not varying types of state legislation are adequate substitutes for a uniform federal statute—these support the view that the present policy of Congress will prevent any effective check upon private restraints in the insurance business.

In summary, then, the problem of making the substance of the antitrust laws adequate to express the antitrust policy centers upon two points: clarification and extension of the law of monopoly so that it may cope more adequately with the problems of big business, and reconsideration of various exemptions which have appreciably weakened the law against collusion.

V

The administration of the antitrust laws also leaves something to be desired. Essentially the antitrust policy is expressed in litigation of particular cases. Effect is given to a broad economic program through prosecutions before courts and quasi-judicial commissions. There is much to be said for the use of such devices. Their punitive and corrective character maintains respect for the law. They dramatize issues of policy in a form which obtains a substantial degree of law observance even when enforcement is on a flagrantly inadequate scale. They bring to the support of the antitrust policy the strong tradition that laws must be enforced and obeyed, and thus they safeguard the policy against attacks by vested interests. The judicial process provides a compromise between inflexible rules and adaptation to changing economic circumstances. The case-by-case method and the so-called "rule of reason" permit the courts to take some account of economic fact and analysis under the varying circumstances of a far-flung industrial system. Much can be done by the prosecuting agency, through intelligent selection and grouping of cases, to give the law clarity, continuity, and appropriate economic focus.

Nevertheless, reliance upon litigation has very substantial drawbacks. Since prosecution cannot hope to catch more than a portion of those who violate the law, there is always danger that law enforcement will appear to be a haphazard and socially meaningless process victimizing those who are unfortunate enough to get caught. Antitrust cases must be litigated in a context of legal concepts derived from private disputes; and these include the preconceptions that every case stands alone, that one side must be right and the other wrong, that wrongdoers should be punished, and that punishment and orders by the court can take the place of continuous surveillance, negotiation, and compromise. In prac-

tice these ideas are so inappropriate to an economic policy that they are informally modified by exercise of an unusually wide discretion in the prosecutor's selection of cases and by frequent use of informal negotiations between prosecution and defense. Even so, there is a continuous problem in maintaining the vitality of the economic policy amid the precautions and technical complexities which are appropriate to a decision whether particular individuals shall be punished. Moreover, lawsuits are contests in which prosecution and defense both play to win, and in this process there is danger that no one will become fully aware of the true issues of public policy.

Furthermore, judicial procedures are, in some respects, ill-adapted to the subject matter of antitrust cases. The rules of evidence were developed for relatively simple activities which bystanders could directly observe. They are often inappropriate in tracing the ramifications of a far-flung conspiracy or the significance of a highly concentrated business structure. Statistics may be hearsay, and what everybody knows may not be evidence. In criminal procedure, it is unduly easy for the prosecution to obtain an indictment, which in itself has a punitive effect upon a defendant who may be eventually found not guilty; but after the indictment the scales are weighted in behalf of the defense by the rules that the violation must be proved beyond a reasonable doubt and that the prosecution may not appeal an aquittal by a lower court. Moreover, the jury is often reluctant to convict people who are well-dressed and conventionally respectable, particularly if the facts in the case are too complicated to be easily understood or if businessmen on the jury are themselves engaged in practices like those of the defendants.

In civil procedures, though the infirmities of the rules of evidence are still apparent, the chances of the trial are better balanced. However, there is no adequate provision for formulating the judge's final decree in the light of a full study of the relevant facts, nor is there suitable provision for administrative surveillance over the subsequent effect of the decree. Efforts have been made to meet these defects of the civil suit by giving the Federal Trade Commission authority to help formulate decrees and to report upon their consequences, but these powers have been scarcely used, perhaps because they are located at a substantial distance from the court which carries the responsibility.

The Federal Trade Commission's form of adjudication has its own special defects. Equipped with broad powers of subpoena and with economic as well as legal staff, and authorized to act as both complainant and judge, the Commission was apparently intended to explore the frontiers of the law and to break new ground in developing public policy. It has done some of this work well. But the courts have not been receptive to departures from the main channel of the law on the part of a

commission which is both prosecutor and judge and whose procedure is not wholly judicial; and the commissioners have allowed their conservatism, their desire not to be overruled, and the professional training of their lawyers to keep most of their work conventional rather than exploratory.

For conventional litigation, the commission device has been weak because of the limits imposed by law upon the Commission's powers of enforcement. Until recently the Commission's orders were not enforceable until they had been violated, confirmed by a court, and again violated, so that three successive violations preceded imposition of any penalty. Recent amendment of the Federal Trade Commission Act has still left it necessary to prove two violations before a penalty is imposed. Moreover, the injunctive powers of the Commission are narrower than those of a court of equity.

Many of the difficulties which have just been recited are inherent in litigation. Others, however, might be alleviated or done away with. It would be possible to revive the Federal Trade Commission's willingness to explore legal frontiers, to give the Commission better teeth, and to equip the courts with better facilities for preparing and watching antitrust decrees. Provision of a civil penalty should make it possible to find a deterrent for violations of the law without accepting the handicaps of criminal procedure. Something might be done to liberalize the rules of evidence in antitrust cases as the rules of pleading have already been liberalized in the preparation of antitrust indictments and complaints.

Even so, there is need to provide administrative procedures which reach beyond litigation. The simplest of these would be a procedure for rule-making, designed to permit a rule of law to be given general application before it is exhaustively announced and reannounced in a series of cases brought against individual defendants. The need for such powers has been informally recognized by the Federal Trade Commission in the establishment of a procedure for formulating and publishing trade practice conference rules; but in the absence of statutory authorization for this rule-making the effectiveness of the trade practice conference is unduly circumscribed. Moreover, the definitions of illegal conduct which might properly appear in such rules should develop when there is a public need, regardless of whether or not any trade group chooses to propose that a rule be issued.

Beyond such procedural matters, however, there is need to develop aspects of the antitrust policy which lie outside the proper field for litigation. The nature and extent of the need may be illustrated by a particular case in which it has been felt and met, at least in part, by improvisation. The effort to get rid of the restrictive practices of international cartels began in this country with a series of antitrust cases

which were relatively conventional in their focus and scope. It soon extended to a presentation of the facts about international cartel arrangements at a long series of Congressional hearings, through which a little-known pattern was made familiar to the American people and a substantial public opinion was built up against continuance of the arrangements. As knowledge grew, it became apparent that the cartels would be strengthened or weakened by the policies of the Alien Property Custodian in disposing of seized enemy property, of the surplus property agencies in disposing of government war plants, of the Department of State in encouraging the seizure and disposal of enemy property in other countries, and of military government in supervising industry in occupied territory. It also became evident that cartelization has been facilitated by peculiarities of the patent, trade-mark, and corporation laws both here and abroad, and that much can be done to reduce the danger from cartels by appropriate amendment of these laws. Finally it became apparent that our own laws cannot be made fully effective with reference to international cartels without the co-operation of other countries.

Thus the attack upon international cartels calls for co-ordination of various administrative activities, as well as investigation, publicity, law-making, treaty negotiation, and litigation. An administrative division of the Department of Justice and a quasi-judicial independent commission are not suitably placed to formulate and give effect to such a co-ordinated policy. Considering the administrative handicaps, the accomplishments have been remarkable. Many of them have been made possible through the personal friendship of individuals who hold key operating positions in the different agencies and in Congress. An interdepartmental committee, organized under the auspices of the Department of State, has also provided means for discussion and co-operation. Nevertheless, there has been nowhere a central direction and a driving leadership such as is possible in protecting the interests of agriculture or in formulating the financial policies of the United States. Until we devise suitable administrative machinery to envisage the problem of trade policy as a whole and to place the antitrust laws in an appropriate setting of administrative action, it is probable that there will continue to be a relative underemphasis upon what cannot be done by litigation.

IS GOVERNMENT INTERVENTION OR PLANNING CONSISTENT WITH ANTITRUST POLICY?

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Part I. *Kinds of Public Intervention*

Before considering how government actions may complement or conflict with antitrust policy, it is necessary to distinguish the different types of government intervention or planning. Many lists could be prepared, depending upon the criteria used. The following list is based primarily upon the *degree of change* in the economic system from laissez faire, and the *instruments of control* used in producing that change.

Type 1. Government planning of the general environment in which private industry functions through setting rules for business.

Examples are rules or facilities for:

a. Conduct of private enterprise—law of contract, bankruptcy, partnerships, banks, weights and measures.
b. Partnerships, corporations, co-operatives, and other business organizations.
c. Enforcement of arrangements—courts, police, etc.
d. Maintenance of competition—antitrust acts, Clayton Act, Federal Trade Commission, etc.
e. Labor working conditions, hours, collective bargaining, etc.
f. Composition, quality, or healthfulness of products—food and drug, advertising, containers, etc.
g. Limitation of competition in specified cases—"fair price" laws, resale price maintenance laws, patents, trade-marks, copyrights.
h. Financial mechanisms—banks, insurance companies, reserve banks, etc.

Type 2. Government modification of the general money environment in which private industry functions through fiscal and monetary operations.

a. Central bank policy—interest rate and reserve policy (Federal Reserve System).
b. Selection of taxation policy with reference to effects on buying power.
c. Manipulation of public expenditure and investment to maintain employment (pump-priming, public works, countercyclical expenditures).
d. Balanced use of tax, expenditure, and monetary policy to insure

adequate outlays for full production at high employment (national budget approach, Full Employment Bill).

Type 3. Public activities to stimulate production or consumption by disadvantaged groups.

a. Public facilities for financing productive groups not provided for by private institutions—farmers, co-operative organizations, small businessmen.

b. Public provision of funds or commodities, or arrangements for purchase at reduced prices, for low-income consumers—direct food distribution, school lunches, food-stamp plans, milk plans, maternity benefits, poor relief.

c. Social security insurance—unemployment, old age, sickness, etc.

Type 4. Control of the uses of privately-owned property, by police or other direct regulations. This is a broad group, with many different subtypes, of which only a few can be listed.

a. Restrictions on uses of particular pieces of real estate.
   (1) Limitations in accordance with zoning laws or ordinances, or building regulations.
   (2) Limitations on agricultural production practices in accordance with needs to prevent soil erosion (local soil conservation districts).

b. Restrictions on entry into particular occupations or enterprises through requirement of licenses, public service permits, etc. (taxicab licenses, etc.).

c. Limitations on the movement of goods or vehicles, other than those necessary for safety, disease prevention, or other noneconomic objectives. (Examples: limitations of milk markets by inspection requirements, and arbitrary state limitations on sizes, weights, and equipment of trucks.)

d. Regulation of specific businesses in the public interest—security and commodity exchanges, insurance concerns, brokerage houses, terminal markets.

Type 5. Public control of the rates, services, earnings, and other phases of industries granted more or less exclusive public charters.

Public regulation of "natural monopolies" may be independent of, or associated with, broad public plans for economic development.

Type 6. Private ownership and control, with production, price, or wage policies guided by public programs or objectives.

This group is distinguished from groups 4 and 5, 7 and 9, in that co-operation of private owners with public programs is secured voluntarily, in return for benefits or privileges offered to those who co-operate.

Examples:

Object	*Inducement*
a. Rapid land settlement	Homestead Act
b. Rapid development	Subsidies to canals and roads
c. Opening the West	Subsidies and land grants for transcontinental rail construction
d. Developing industries	Protective tariffs or subsidies
e. Encouraging maritime shipping and air transport	Mail and other subsidies
f. Stimulating private housing	Reduced interest rates and insurance on risks
g. Stimulating local public housing	Subsidy on interest rates
h. Adjusting farm production to demand (down or up)	Benefit payments and/or price guarantees

Public intervention through incentives to private industry to act in accordance with publicly-conceived objectives has a long history. The degree of planning varied from only broad policy objectives (as with the Homestead Act) to detailed plans and programs, as in housing and agriculture.

*Type 7. **Private ownership, but with production, price, wage, distribution, or other policies for all units in a given industry controlled by industry-wide rules developed by joint public-industry action, and enforced by public power.***

a. Industry agreements made with little or no public control, and with no relation to a general interindustry plan (NRA codes).

b. Industry agreements made under strict public control, and fitted into a program for a wide sector of the economy (AAA marketing agreements).

c. Industry agreements made under strict public control, and fitted into a consistent over-all program for balanced expansion in all basic sectors of the economy (industrial expansion programs).

*Type 8. **International commodity arrangements, with exports, prices, and in some cases production of a given commodity controlled by government action.***

These may control simultaneously private producers and traders in some countries, and publicly-operated production and trade in others. (Examples: tin, sugar, wheat, coffee.)

*Type 9. **Private ownership, with many phases of production, consumption, and prices controlled by government order.***

This type of authoritatively-directed economy is familar today as that used in operating the war economy.

Type 10. Public ownership of particular sectors of the economy.

a. *Without advance planning.* Public ownership of individual enterprises or industries can take place without essentially modifying the methods of policy determination under private enterprise. Under the Weimar Republic, the German aluminum industry was publicly owned, yet the industry was part of the international aluminum cartel and followed its restrictive policies.

b. *With advance planning.* The TVA is one good example of public ownership of a particular enterprise guided by long-range programs and objectives in the general welfare. The nationalization of the British coal mines is similarly based on long-range plans to close down submarginal workings, install modern machinery in the remaining mines, and so raise the efficiency of labor far more than was possible under private ownership.

It remains to be seen how the industries nationalized under the present swing in Europe will fall into these two groups.

Type 11. Public ownership of most or all the means of production, and operation of that production according to definite advance plans. This type of planning is, of course, characteristic of the U.S.S.R., though even Russia has never reached 100 per cent socialism. Because of the wide publicity attending the successive five-year plans of the Soviet Union, and their success in achieving a phenomenally rapid expansion of Russian output, many persons have come to associate the term "planning" exclusively with socialism or communism. As every economist is aware who has studied the varying uses of public planning in all countries, this interpretation is far from correct.

In preparing this partial list, generalized services now customarily provided by public agencies have mostly been omitted.[1] These include education, public health, roads and streets, law and order, postal service, agricultural research and extension, statistical and economic information, market reports, etc. Controls of foreign trade to alleviate international balance difficulties (exchange controls, blocked currencies) or to facilitate autarchic programs (import quotas, etc.) have also been omitted as having little bearing on the issues under discussion here.

Governmental action is an integral part of the warp and woof of our

[1] For a listing of public activities from the point of view of the industry or economic group regulated, see Harold D. Koontz, *Government Control of Business* (Houghton-Mifflin Company, 1941).

existing economic system. Which governmental actions are currently regarded as "interventions" depend in part on whether they have already become conventionally accepted or are currently matters of debate, and in part on the viewpoint of the individual making the judgment.

Part II. *Kinds of Private Intervention*

Paralleling government intervention, and in many cases merging into it or mixed with it, are a large variety of "interventions" by private groups—"interventions" in the sense that they interfere with the assumed smooth working of a capitalistic economy, controlled by a competitive price system. Private interventionism is important here, for antitrust policy is mostly a counterattack—or at least a delaying action—against such private activities.

Private interventionism is more difficult to catalogue than public, for it is not usually codified in public law. On the contrary, much of it is secret, furtive, or in some cases even beyond the conscious awareness of the individuals concerned.

Among such types of private intervention may be mentioned:

Monopoly of production or distribution, complete or partial (aluminum).

Oligopoly or monopolistic competition in production (automobiles, steel, cement); in distribution (meat packing); or in both (oil).

Monopoly or monopolistic competition by definite agreements among potential competitors (cartels, rings, patent pools, etc.).

Monopolistic competition through product discrimination (packaged foods, cosmetics, etc.).

Trade association exchange of information resulting in concerted action on prices, cost calculations, sales policies, etc.

Labor monopolies (restriction of entry, excessive apprenticeship rules, etc.).

Agreements fixing rates of professional services (doctors' fees, lawyers' fees, etc.).

Agreements or standards for other services (realtors' fees, commission rates for brokers, etc.).

This list does not go into the varied methods of operation, such as price leadership or setting administered prices, controlling or allocating outlets, restricting the adoption of innovations, limiting "destructive competition," assigning special trade areas or customers, establishing special price structures (such as basing-point systems), planning industry output, prices or wages, or otherwise engaging in private "economic planning."[2] Such actions, solely on a private profit basis, affect the welfare of the whole society without public knowledge, public responsi-

[2] See Arthur Robert Burns, *The Decline of Competition* (1936).

bility, or public accountability. In many cases, they are carried on by self-perpetuating officeholding cliques, with no effective control even by the shareholders who theoretically "own" the enterprise.

Regardless of the way in which or extent to which monopoly exists, any impairment of competition has the effect of prices and profits being held at higher levels, and consumption and employment at lower levels, than would otherwise exist with free competition under the same conditions. The net result is not only to reduce production and employment but also to contribute toward inequality in income distribution and so to aggravate the difficulties of maintaining total outlays for products equal to the potential production of the society at full employment. This general conclusion is subject to one exception. Where monopoly has the effect of concentrating production so that unit costs are lower than they would be if the same business were divided among a number of small competitors (as in automobiles), prices may be lower and output may be larger under monopolistic competition than they would be if pure competition were maintained. Even so, aggregate profits will be higher than under competition, and the difficulties due to a more unequal distribution of income will follow, despite the greater technical efficiency and lower prices. One American corporation, whose past profits have continuously and greatly exceeded those possible under pure competition, has recently taken the position that the public interest in their activities must stop at wage rates alone, and that their price and profit policies are matters "for management alone." In view of the relationship of such policies to the national problem of maintaining full employment, such a position is patently absurd—as President Truman has recently pointed out.

Many monopoly prices are determined by administrative decisions, and are more rigid or inflexible than under competition. Earlier discussions have emphasized the effects that such prices may have in preventing necessary readjustments in the economy, and particularly in impeding recovery from depressions.[8] Those discussions reflected the tenor of economic discussion during the thirties when the question of why the economy could not recover promptly from depression was one of the dominant concerns of economists. The effect of monopoly on the distribution of income, and hence on the savings-investment problem which I emphasize above, ties monopolies in with the current preoccupation of economists: How can we establish *and maintain* high levels of

[8] Sessions on "Preserving Competition versus Regulating Monopoly," *American Economic Review*, Mar. Sup., 1940, pp. 164–218. Especially the following: Corwin D. Edwards, "Can the Antitrust Laws Preserve Competition?" pp. 171, 175–177; Paul T. Homan, "In What Areas Should Antitrust Policy Be Replaced?" pp. 185, 188; Melvin de Chazeau, p. 214.

Gardiner Means, "The Structure of the American Economy," in Part I, *Basic Characteristics* (National Resources Committee, June, 1939), pp. 122–152, and in Part II, "Toward Full Use of Resources," pp. 9–17 (National Resources Committee, June, 1940).

production and employment, without recurring long departures from full employment levels? From this point of view, the profit and wage policies of monopolies may become even more important than their price policies. The effect on the well-being of the economy from extensive failure to use resources—as during great depressions—is far more devastating than the slight losses in potential efficiency which might result from failures to allocate resources between activities with precisely the optimum application even though resources were fully utilized.

Part III. *Interrelations of Public Intervention and Antitrust Policy*

The public interventions listed in Part I include some that facilitate or enforce competition, some that encourage or uphold monopoly of various types and degrees, and some that provide methods for the detailed control of economic policies different from either competition or private monopoly. In addition, it includes some, such as methods for control of the general financial environment, which have no direct effect upon competition or monopoly. The problem of attaining full employment through such measures, however, becomes more difficult if extensive monopoly or oligopoly is present.

Interventions Facilitating or Enforcing Competition

These include most of those listed under Type 1 (excepting subtypes 1-g and 4-d). The extent to which methods of enforcing competition (subtype 1-d) have succeeded or failed in restricting the area of partial or complete monopoly, and steps that might be taken to increase their effectiveness, have been discussed extensively at earlier meetings, and lie outside the scope of this paper.[4]

Interventions Encouraging Monopoly

This includes subtypes 1-g, 4-c, and 7-a.[5] In addition, subtype 4-b may be misused, at times, in ways that support monopoly. Many public limitations of competition—patents, trade-marks, copyrights—were originally granted not for the purpose of creating monopoly but rather for rewarding and protecting innovators. Revision of these grants to correct resulting undue monopoly effects is now being vigorously prosecuted by administrative and legal efforts. Legislative revisions may be required also.

Industry-wide agreements under public power but with little or no effective public control or planning (subtype 7-a) tend to become legalized cartels. Many monopolistic habits introduced during the NRA period have continued since, with resulting further diminution of the area of effective competition.

[4] Corwin Edwards, *loc. cit.*
[5] The tendency of business groups to secure the passage of laws that support monopolistic practices has been pointed out in prior discussions of the subject.

International Commodity Agreements (Type 8) at times have served to supplement or enforce private international cartels, or to create them under public auspices (tin, rubber). This will be given more detailed treatment later.

Interventions Providing Detailed Public Control of Some Type

This group includes all the various types of detailed intervention and control, either under private or public ownership. Those under private ownership range from public utility control through single-industry programs based on voluntary co-operation; and then on to single-industry or industry-wide programs based on mandatory control of some kind, and aided by public planning. Intervention through public ownership may cover either limited sectors or most or all major industries.

Public utility regulation (Type 5) has been extensively discussed in the past, and will not be considered at length here. As noted in earlier discussions, utility commissions have paid most attention to the private business interests of the concerns they regulate, such as, for ICC, "the effect of rate changes on carrier revenues and credit,"[6] and have given less attention to the effect of utility rates and services upon the productivity or stability of the economy as a whole. If methods of economic planning were developed for other sectors of the economy, utility commissions might both participate in the preparation of the programs and utilize them as a guide in considering their own policies more broadly.

Industry programs of stimulation, guided by detailed planning. Two subtypes (6-f and 6-g) both occurred in housing. In one program, the federal government established a system of insuring private investors against risk of loss on housing loans (Federal Housing Administration); in the other, construction of low-cost housing and slum clearance by local authorities were aided by an annual federal subsidy to reduce the rents charged (United States Housing Authority). The loans placed and the projects approved were guided by detailed analysis of local housing needs and conditions, and by publicly-determined standards of construction, materials, financing methods and charges. The technical guidance of individual farmers receiving rehabilitation loans under the Farm Security Administration is a parallel case, though with the planning restricted to narrower problems.

The agricultural production program of the United States as it has evolved over the past fifteen years, is our most massive present example of producer-government co-operation (subtype 6-h). These national food programs are planned from the bottom up as well as from the top down, and the local applications are worked out through democratically-elected farmer committees—what Henry Wallace called "economic democracy."

[6] Donald Wallace, *loc. cit.*, p. 200.

One objective in the farm planning is to prevent the cycles of over-and-under production in particular products. These occur under pure competition in somewhat the same way that a bather under a shower bath, with a long pipe between the valves and the nozzle, has a tendency to turn the water too hot before the water runs hot on him, and then to turn it too cold before the falling water begins to reflect the earlier changes in the valves. The hog cycle, the beef cycle, and to some extent the recurring housing cycle, reflect this overcompensation under competition. Another objective is to make necessary changes gradually, instead of waiting till accumulated demands or supplies pile up into a severe shortage or surplus. Thus Secretary Wickard's first program to stimulate increased livestock output for war was issued in the spring of 1941—eight months before Pearl Harbor; and the present programs aim to taper off some of the war-expanded oil and fat and poultry production in step with the prospective needs.

These agricultural programs depend in part on pre-existing knowledge of the control forces in agricultural supply and demand. These grew out of the vast amount of quantitative research in agricultural economics since 1920, and were tested in the annual *Agricultural Outlook Reports* which the Department of Agriculture had issued annually ever since 1922. These *Outlook Reports* carried forecasts of future commodity developments as a service to farmers in planning their production. Over the years, these forecasts have had a "batting average" of 85 to 90 per cent correct—a far better score than any general business forecasting service.[7] One reason why AAA could attack its problem and get somewhere with it while NRA fumbled so, was that the facts and problems were known and understood for agriculture but not for industry.

Public control of agriculture through government-farmer co-operation also has been developed in most of the rest of the world. Canada, the United Kingdom, Denmark, Australia, New Zealand, Brazil, and Argentina have parallel programs, though restricted in some cases to major exported or imported products. Many other countries—the Netherlands, France, Hungary, etc.—had similar highly organized agricultural programs before the war. The newly created international agency, the Food and Agriculture Organization of the United Nations, has for one of its specific tasks to work out a better integration of the national agricultural programs of its various member nations, and to work towards a "long-term co-ordinated production plan for the best uses of these resources on a world scale, based on better diets for their own people and on the international demand for nutritionally better food."[8] As in-

[7] Oris V. Wells, *A Comparison of Outlook Statements with Subsequent Events* (U. S. Department of Agriculture, Bureau of Agricultural Economics, mimeographed, Jan. 24, 1930).

ternational planning develops as an outgrowth of domestic planning, the prospects of re-establishing the higgling of the market as the controller of the destinies of wheat, cotton, or tobacco producers becomes ever dimmer. The international plans also recognize the need for industry to expand in balance with agriculture, and the Quebec conference directed FAO to do what it could to help these developments.

Disastrous falls in farm prices in 1920 and 1929 helped precipitate two great depressions after World War I. The world-wide structure of public agricultural programs may make such sudden and uncontrolled price debacles impossible today.

Industry programs based on mandatory control (Type 7). These programs may overlap the voluntary programs just discussed (Bankhead cotton sales allotments, crop marketing quotas).

Subtype a. Industry programs with little public control or guidance are best illustrated by the NRA codes. These were little more than legalized cartels. "Prevention of destructive competition" by industry agreement without effective public check on the use of public power probably hampered rather than helped the industrial recovery of 1933–35.

Subtype b. Industry agreements under strict public control, and fitted into wider programs, are illustrated by AAA marketing agreements. They were kept under close public scrutiny, and administered by public officials. In the case of fluid milk and a few perishable fruits, they may become permanent methods of public administration of price, production, and consumption, alone or in conjunction with parallel state controls.

Subtype c. Industry expansion programs, as part of an over-all plan and program for balanced expansion in all basic sectors of the economy,[9] remain as yet untested. This proposal involves expanded production, lower prices, higher wages, markets for private industries participating in the program underwritten by public guarantees, and public purchase and warehousing operations as shock-absorbers where needed. The proposal has been criticized on four main grounds: (1) administrative unworkability; (2) the necessity of simultaneous over-all planning for many major industries; (3) failure to provide methods of maintaining total outlays for the products of industry; and finally (4) the fascist

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[8] Resolution XIV, Final Act, United Nations Conference on Food and Agriculture, Hot Springs, Virginia, 1943, *Department of State Publication 1948*. Conf. Series 52. See also *Report of Commission "A,"* sections on Agriculture and Marketing, FAO Conference, First Session, Doc. 175, Oct. 28, 1945.

[9] Mordecai Ezekiel, *$2500 a Year* (New York: Harcourt Brace and Co., 1936); and *Jobs for All* (New York: Alfred A. Knopf, 1939).

Industrial Expansion Act, H.R. 10,924, 75th Cong., 3rd sess.; and Monopoly Control Act, H.R. 7504, 76th Cong., 1st sess.

character of over-all business-government planning of the economy. These criticisms may be briefly commented upon.

1. In the light of the detailed planning and scheduling used during the war period, the criticism of administrative unworkability seems less significant today. On the contrary, current developments in the motor industry and other areas of labor dispute seem to be driving the public toward making the federal government the arbiter of wages, prices, and profits in peace as well as in war. Decisions on these key policies would be wiser if guided by broad industrial plans.

Planning for war seems simpler in some respects than planning for peace, if the peacetime consumer is to be left freedom of choice. Yet the actual demands of war were, in fact, even more unpredictable than the normal demands of peace—as the constant revisions and changes in the munitions programs, the cutbacks and emergency demands all testify. It is doubtful if the generals and admirals predicted the needs of the successive campaigns or of the "Battle of the Bulge" any more closely than statisticians and economists would forecast demands of consumers and business with stated levels of national income.

2. With respect to the possibility of planning for many industries at once, the war economy has left us with far more knowledge, experience, and, above all, statistics. Industrial plans for peace could be made far more readily today than before the war.

3. The original proposals for planned industry-wide expansion did not adequately assure that outlays for goods and services by consumers, business, and government would year by year equal the value of the goods and services to be produced. Provision was made for balancing prospective production against prospective sales, for temporarily absorbing any unsold excess into government-owned stocks, and for lowering prices and raising wages so as to broaden the equality of income distribution and increase mass purchasing power.[10] No clear provision was made, however, for raising expenditures if stocks continue to pile up unsold. Over-all industrial planning of this type would need to be accompanied by fiscal and monetary planning of subtype 2-d.

4. The alleged fascist nature of the over-all planning proposal stems from its use of industry councils to draft industry programs, with management, labor, government, and consumers all participating. The *haute politique* aspect of international business planning has intensified these fears.[11] After observing the tendency of some businessmen serving temporarily as public officials to twist wartime economic planning in

[10] Mordecai Ezekiel, *$2500 a Year*, pp. 92–93, 127–132, 167–169, 176–177, 182–185; *Jobs for All*, pp. 25–33, 82–83, 186–189.

[11] Theodore J. Kreps, "Cartels, a Phase of Business *Haute Politique*," *American Economic Review*, Feb., 1945, pp. 297–311; Robert Brady, "The Role of Cartels in the Current Cultural Crisis," *American Economic Review*, Feb., 1945, pp. 312–320.

their own interests, I would be inclined now to modify my earlier proposals. The "industry authority" should be an advisory committee, and the final decisions on programs should be made by a career government administrator, responsible to legislative bodies and public opinion. Today many key economic decisions are made by business officials responsible to no one, not even to their stockholders, and able to intimidate legislatures or even national governments to their will.[12] Planning, in the open, for the public interest and with public accountability, is far less likely to become fascistic than planning in the dark, for private monopolistic interests and with accountability to no one.

International commodity arrangements involve formal governmental participation in international programs for the production, consumption, and pricing of particular commodities. To some, these agreements have seemed indistinguishable from private international cartels.[13] Actually, however, these international agreements, as well as the national programs which underlie them, grew out of the failure of competitive forces to bring about necessary economic readjustments without disrupting the whole economic fabric.

Many primary products (notably wheat, cotton, and rubber) are characterized by inelasticity of demand, marked inelasticity of supply, at least in the contraction phase, and wide fluctuations in acre yields. When large supplies pile up, prices fall greatly, yet consumption expands but little, and production continues almost unchanged. Opportunities for the excess workers or resources to be absorbed elsewhere are limited by the widespread existence of monopolistic controls in other phases of the economy; while the inelastic supply response holds workers and resources in the industry, despite the lack of demand for the output. Public measures under international agreements provide a way to speed the necessary economic adjustments and to reduce the distress suffered by producers and workers during the process.

In a second group of cases, the difficulties are mainly national or localized. Some commodities (such as tin or nitrate) provide the major source of income for important producing countries, both for industrial workers and for public revenues. Economic distress in such commodities not only creates need for great shifts in the utilization of workers in such countries but also cuts off the public revenues which might be used for relief expenditures to bridge over the transition period. Governments faced by such difficulties necessarily turn to international commodity agreements as one way of easing the situation during the readjustment process.

In the past, international commodity arrangements sometimes have

[12] Kreps, *loc. cit.*, pp. 304–306.
[13] Kreps, *loc. cit.*, p.303.

been used to bolster or legalize private cartels in industries where the justification for public intervention did not exist. In addition, such international agreements have often been dominated in fact by industry representatives and have thus used public power for private purposes. To correct these abuses, the proposals for the new international trade conference, put forward by the United States with the concurrent approval by the United Kingdom, suggest limiting international commodity agreements to the two kinds of situations just mentioned, requiring strong representation of consumers as well as producers, and placing their whole operation under the control of a new international public body.[14] In addition, the FAO has been given the task of fitting commodity operations in agricultural commodities into its general programs for the expansion of production and consumption, and "seeing to it that measures for the reduction or restriction of particular products, if found necessary, are accompanied by appropriate arrangements for the productive use of the displaced resources and people."[15] Similar activities for industrial products may be undertaken by the Social and Economic Council or the proposed International Trade Organization.

These new institutional arrangements should function so as to minimize undesirable monopolistic results of international commodity agreements, and yet use them as an arm of conscious public control in situations where they will help achieve a balanced yet expanding economy.

Wartime Economic Regimentation

Control of the American economy for war purposes included rationing finished goods to consumers and equipment to producers, priorities or central advance scheduling of the flow of scarce raw materials and subcomponents, mandatory orders to manufacturers what to produce, controls of manpower, transportation, prices, exports, imports, and shipping. The details of day-to-day business were centrally planned and managed wherever necessary for the single purpose of military victory. Production was geared to the munitions requirements set by military authorities; a large part of the output was pre-empted by these orders; the military goals set the objectives for the whole economy. Voluntary incentives, such as subsidies, liberal wartime amortization agreements, attractive prices, government financing or ownership of new plants, were used along with the mandatory controls. The relaxation of these wartime controls now reveals how much less authoritarian was the kind of peacetime planning used in agriculture.

[14] *Proposals for the Expansion of World Trade and Employment* (Department of State, Public 2411, Nov., 1945), pp. 5–6, 20–23.

[15] Food and Agricultural Organization of the United Nations, *Report of the First Session of the Conference* (Washington: FAO, Jan., 1946), pp. 14–16, 43–44.

Public Ownership of Limited Sectors of the Economy

Public ownership of limited sectors may be planless or planned. In the former case, the managers for government may follow the previous traditional business practices, and continue to participate in monopoly measures or cartel activities. Many of the "nationalizations" of industry now so widely advertised in Europe may prove to be of this type, with policy actions under public ownership little changed from those under previous private control. This possibility might be reduced somewhat if the current American proposals for strong international action to control or curb private international cartels should be adopted.[16]

Where public ownership is guided by long-range planning, the situation is far different. Where the government owns only a sector of the industry while the balance remains in private ownership, as with TVA, the publicly-owned portion may provide "yardstick competition" to force down the prices and possibly even the profits of the privately-owned portions, and so stimulate increased production and consumption. Public ownership of an entire industry, as with the British coal mines, may provide a means to technical improvements and better economic policies through the whole industry. There is, of course, the alternative possibility that government ownership may be slow to make technical improvements, or may follow policies of raising charges in hard times.

No matter how wise or unwise the policies followed under public ownership, it still remains true that any profits which result go into the public treasury, rather than still further narrowing the distribution of income, as with private monopolies.

Public Ownership of all Major Sectors of the Economy

Full socialism, so familiar today from the gigantic Russian experiment, does certainly dispose of the antitrust problem. The question of the wisdom or unwisdom of particular price and wage policies adopted by industrial managers still remains, and the question of the effect of political control of the economic process on both economic efficiency and democracy must be faced. There are even some reasons to believe that over the long run, managers of socialized industry will tend to make decisions not greatly different from those made by equally well-informed private managers operating under full competition.[17]

With full public ownership, the problem of the effect of profits on the distribution of income disappears. Profits revert to the state, and become available for new investment, for direct public welfare expenditure, or for price reductions or wage increases, in accordance with

[16] State Department, *loc. cit.*, pp. 4–5, 19.
[17] A. P. Lerner, *The Economics of Control, Principles of Welfare Economics*, 1944.

political decisions and/or the economic plans. The problem of the savings-investment balance and of full employment—the central unsolved problem of economic theory and practice in the capitalistic world—vanishes from the economic picture, and other problems take its place.

Conclusion

Government intervention, with or without planning, is present in multitudinous forms in our mixed economy. Some kinds of government intervention, such as price-maintenance laws, run counter to antitrust policy. Other types, such as the use of fiscal and monetary policy for full employment, have no effect on antitrust policy. Other kinds, such as direct participation in detailed economic policy making in agriculture or in international commodity arrangements, provide substitute means for the public control of the key policies of private industries. In the extreme form of public ownership, government itself may act like a monopolizer or may plan its policies in the widest social interest.

Economic thought has shifted from the concern of the past decade with price flexibility as a means to secure prompt economic readjustments, to the present concern with adequate national outlay to maintain full employment. Corresponding shifts in emphasis are needed in dealing with monopoly problems. So long as we have a society where protracted periods of underemployment can occur, the effect of monopoly in extorting unduly large profits and worsening the distribution of income may be more important than its effect on reducing the efficiency of combination of the factors of production.

Within our mixed economy, competition should continue to be used to the extent it can be made effective and antitrust policy should be continued for these purposes. The steady growth of concentration and private control shows the need of other measures in fields where competition cannot be made workable. There is a world-wide trend to wider public participation in, and responsibility for, industrial policy making. The United Nations are creating a series of new institutions which will facilitate international co-operation in economic policy making. Much of the present planning of international economic policy here in the United States is directed toward establishing freer international trade. Even so, the trend of events here and abroad suggests that eventually antitrust policy may become a less important way of dealing with the problem of the decline of competition, while more direct and purposive instruments of public policy making and action take the center of the stage.

DISCUSSION

VERNON A. MUND: In his paper, "The Outlook for Effective Competition," Mr. Comer renders a noble service in developing the thesis that effective competition can be secured in the American economy if supported, along with other measures, by a vigorous and unremitting enforcement of the antitrust laws. All too often nowadays monopolistic behavior is pictured as being inherent and inevitable, arising necessarily from modern technology or from overhead costs and defying all human intervention and legal regulation.

Mr. Comer's presentation of the patterns of monopoly which now exist in American industry and the world economy furnishes much valuable information on recent trends. Price fixing, the concerted use of pricing formulas, price leadership with its twin evils of discriminatory price cutting and price rigidity during a business recession, monopolistic combinations and trade organizations, the use of patents for price control, and international cartels bearing on the domestic economy—all are monopoly forms presently flourishing which demand vigorous antitrust prosecution. Surely there is little basis for the point of view expressed in recent publications of the National Industrial Conference Board and the National Association of Commodity Exchanges that the mere removal of wartime controls will mean a return of free, competitive markets. The contrast between the actual course of monopoly which the American people have permitted to develop in this country and the widespread profession of belief in a free competitive price system is indeed a striking one. If we believe in economic freedom and really want free markets, we must give full expression to the thesis of enforcement presented by Mr. Comer.

In the field of domestic commerce, Mr. Comer presents the sanguine though tenuous conclusion that "there is a chance that competition will win out." It will survive if it is supported by businessmen who believe in competition and if there is a vigorous enforcement of the antitrust laws. The more enforcement there is, the more competition there will be in American industry. Enforcement, in other words, is seen to be the life of competition. It follows, accordingly, that the outlook for effective competition must depend upon the outlook for enforcement. How bright is this prospect? Mr. Comer does not tell us, but the tone of his writing is heartening.

It is evident that a realistic enforcement program will require a broad attack on the many forms of monopoly which now permeate our economy. This will include the taking of positive action against basing-point and freight-allowed pricing systems and the replacing of these systems with open, aboveboard, nondiscriminatory methods of pricing. It will require a dissolution of the great financial combinations and trade organizations which give rise to, and make possible, "price leadership" in the sale of basic commodities. It will also require continued and unrelenting action against the use of patents for restraining price competition among multiple sellers.

An important question is whether the executive branch of government and Congress will support the making of such far-reaching changes in our domestic economy. Those interested in maintaining our great corporations

and trade associations will oppose dissolution with all the strength which their wealth and political influence gives them. The difficulty is also the greater because a large part of the public has come to accept the mistaken notion that financial bigness is the necessary condition to technical efficiency and deserves credit for the technical progress which has been made in the past seventy-five years. What are the prospects for undertaking widespread dissolution suits against the financial giants which engage in price leadership? Is there a strong political or economic interest outside of monopoly capitalism presently willing to support unremitting and vigorous antitrust enforcement? These are questions bearing directly on Mr. Comer's thesis which I would like to hear him discuss.

In "An Appraisal of Antitrust Policy," Mr. Edwards states that the broad purpose of the antitrust laws is "to eliminate monopolies and collusive restraints upon trade wherever such devices do not have explicit sanction from public authority." The laws against collusion and monopoly, he observes, are "older than and different from the economic tradition in support of competition among businessmen." Neither law, he declares, requires or presupposes a "general theory of competition" or "an atomized competition in the market such as was long envisaged in competitive economic theory." As a further indication of this point of view, Mr. Edwards speaks of "the mistaken opinion that it [antitrust policy] is identical with a reliance upon competition in economic affairs."

Since the laws on collusion and monopoly are seen to strike primarily at restriction of output and exploitation, it follows in Mr. Edwards' view that "the antitrust laws are appropriate parts of widely different economic philosophies. They fit equally well into the economics of competition and the economics of control. In a competitive economy their function is to maintain the vitality of the competitive forces. In a controlled economy their function is to prevent restrictions and monopolies which are inconsistent with the public purposes expressed in the control."

The view that the antitrust laws do not presuppose a general theory of competition is one which I hope Mr. Edwards will elaborate upon. It is my understanding that the law on collusion developed in relation to agreements and confederacies on price among buyers or sellers, since the effect of such agreements was to impoverish third persons. Among the conspiracy cases reported for investigation in England in 1354, for example, was that of various merchants charged with agreeing that none of them shall buy wool over a certain price, and that none shall sell wool more cheaply than another, "to the great impoverishment of the people." (*Le Liver des Assises*, 27 Edw. III, Section 44.) The law on monopoly in England, on the other hand, appears to have developed somewhat later. In the famous case of *Darcy* v. *Allen* (1602) the action of the crown in excluding persons from a calling of their choice was declared to be against the common law because it restrained "the liberty of the subject." In thus speaking against monopoly the court recognized a principle of competition: the right of individuals to compete and to engage in a calling of their own choice.

A "controlled economy" is usually taken to mean one in which the entre-

preneurial functions of pricing and investment are controlled in various degrees by concerted monopoly action or by government policy. If the control is by government policy, it is expressed by exercising a conscious policy on prices, profits, wages, and investments. Mr. Edwards and I agree that the rule against collusion and the rule establishing the right of persons to compete are important ones to preserve. My question is how can these laws be preserved and applied in a "controlled society"?

Insofar as there are industry agreements and little, if any, public control (such as existed in the NRA Codes), there is certainly concerted action which I believe cannot find support in the English common law. With industry agreements, also, there invariably is restriction on freedom of enterprise, against which the common law on monopoly and restraint of trade has spoken. When industry agreements are made under strict government control there is likewise a restriction on the "freedom and liberty of the subject." Historically, in economics and in the law, I suggest that the rules against collusion and monopoly presuppose (a) an economy in which there are numerous buyers and sellers acting independently on price and (b) an economy in which the buyers and sellers are free to pursue any lawful business or calling without coercion or restraint from others in the field. Such a type of economy, we can agree, is not the kind we have today. A competitive economy consonant with the laws against collusion and monopoly is one which must be created by a comprehensive program of antitrust enforcement, together with such additional, positive measures as are absolutely necessary to make possible a free competitive system. A competitive society of this type in a very real sense is a controlled society. The control exercised by government, however, is not one of enforcing a predetermined policy on wage rates, profits, and prices. It is rather a control exercised by enforcing the antitrust laws and by establishing positive "rules of the game." This, it would appear to me, is the type of "controlled" economy which is consistent with antitrust policy.

The main part of Mr. Edwards' paper considers whether or not the broad purposes of the antitrust laws have been translated into an adequate and workable structure of statutory enactments and judicial interpretations. His appraisal of the law on collusion and monopoly is most excellent and I hope that it will be widely read and studied. Mr. Edwards finds that the law on collusion is "reasonably clear" and that it "has had a substantial salutary effect." The existing law on monopoly, on the other hand, is observed to be "much less satisfactory, both in its substance and in its effect." In reaching these conclusions, Mr. Edwards systematically analyzes the major gaps in the law against monopoly—gaps which most certainly must be remedied before we can expect the antitrust laws to accomplish their purposes. An additional important weakness in our antitrust laws is found in the exemptions which Congress has extended to particular industries or activities. These exemptions, too, require reconsideration and modification. Finally, Mr. Edwards analyzes changes which are needed for a more effective administration of the antitrust laws.

My hope is that Mr. Edwards' appraisal of the antitrust laws will serve

as a basis for new legislation and procedures to strengthen them. As a step in this direction I wonder if the nation's economists might not be asked to endorse a list of proposals to strengthen the existing laws. The action taken in 1932 by the Economists' Committee on Antitrust Law Policy would serve as a basis and precedent for such a survey.

In considering the question, "Is Government Intervention or Planning Consistent with Antitrust Policy," Mr. Ezekiel comprehensively analyzes the many kinds of public and private intervention now prevailing in our economy. Antitrust policy he characterizes as "mostly a counterattack" or "a delaying action" against the private forms of intervention. Strict public planning (an industrial expansion program), on the other hand, is said to provide for a control of economic policies different from either competition or private monopoly. The extent, if any, to which the antitrust laws would fit into the economics of public control is a question not directly answered by Mr. Ezekiel.

Most economists, I believe, would agree that present-day economic organization makes necessary strong government intervention of some type. The basic question is whether this intervention should be undertaken to create the essential conditions for a free competitive system, or to engage in industrial planning by government dictation. The antitrust laws are a vital, necessary procedure to use in creating and maintaining a free competitive society. They need to be strengthened to provide for gaps and inadequacies, as Mr. Edwards has so ably explained. They must also be supplemented with positive "rules of the game." The objective of these measures would be to create in each industry numerous independent business units selling their products to all comers at publicly announced, nondiscriminatory prices. In such an economy the antitrust laws would have historical meaning and significant application.

The alternative to a strengthened and supplemented antitrust program for the solution of the problem of monopoly is one of accepting present-day monopoly organization and imposing strict government planning. In *Jobs for All*, Mr. Ezekiel states that he would introduce industrial expansion with a planned adjustment of production, profits, wages, and prices, in all areas where competition "has been so long absent that it is hopeless to attempt to restore it." (*Jobs for All*, 1939, page 189.) He appears not to favor a program of dissolving large corporate giants, for he believes that modern technology makes bigness necessary. Since his planning contemplates a strict public control, I judge that he would find little, if any, need for the antitrust laws. Indeed, on this point, Mr. Ezekiel states in the conclusion of his paper that "the trend of events here and abroad suggests that eventually antitrust policy may become a less important way of dealing with the problem of the decline of competition, while more direct and purposive instruments of public policy making and action take the center of the stage."

The imposition of economic planning on the monopolistic organization of industry appears to create no qualms for Mr. Ezekiel. In view of the tendency of businessmen to adapt wartime planning to their own interest, Mr. Ezekiel suggests that the "final decisions on programs should be made

by a career government administrator, responsible to legislative bodies and public opinion." Further, he states that the war has left us with far more knowledge, experience, and statistics for use in control. A clearer provision also can now be made for fiscal and monetary planning.

In conclusion, I believe it may be said that if there is to be intervention of a public planning type, Mr. Ezekiel's suggested procedures are inherent in his premises. The issue before us, however, is not whether price and profit policies are matters for public control or for management alone. It is rather whether the public interest can better be served by intervention to create a free, competitive society, or by intervention to impose a dictatorial state control on present-day monopolistic organization.

Emerson P. Schmidt: The general impression left by the three main papers of this session is that monopoly and restrictive practices are becoming more general and that competition is receding. Yet private and public testimony of businessmen is to the effect that interproduct rivalry and competition are becoming more severe. Which view is correct?

Perhaps what businessmen regard as growing competitive threats stimulates reactions to insulate against the extremes of this rivalry. Is it possible, therefore, that restrictionism and competition may grow hand in hand, or is this a case of conceptual incompatibles?

Mr. Comer has provided a considerable list of restrictionist practices. Yet nowhere does he furnish any quantitative measure of the scope of the practices. No one will know whether the restrictive practices apply in less than 1 per cent or in 99 per cent of business transactions. Until this is done, it is very difficult to know how important restrictionism is either in terms of business fluctuations or in terms of distorting resource allocation. The student hears chiefly of the restrictionist cases and not those where competition dominates. In the social sciences pathology gets played up. The figures on the concentration of production in a few firms, of themselves, prove nothing.

Product differentiation through packaging and advertising is highly vulnerable as indicated by the rise in the cigarette field of Old Gold and Philip Morris, to mention only one industry. That is, what any one company can do through advertising in the way of product differentiation can readily be imitated by others so that, in many cases, in the phrase "monopolistic competition" the latter word should be underlined, whereas the disposition in the literature has been to put the emphasis on the former word.

Mr. Comer views identical prices for standardized products, such as cement, as proof of price fixing. Yet, by way of balance, it should be pointed out that identity of prices in a given market, such as the grain or stock market, also is proof of a competitive market in which there can be only one price for a commodity at a given time and place.

Mr. Comer is a strong advocate of price flexibility in terms of mitigating business depression. Mr. Ezekiel, on the other hand, puts little faith in this, saying, "Economic thought has shifted from the concern of the past decade with price flexibility. . . . " The difference arises no doubt from the fact that Mr. Comer is not afflicted with the Keynesian dogmas.

Would Mr. Comer apply his cyclical price-flexibility theory to wage rates? His logic would require it, since wages constitute from 70 to 80 per cent of all costs. In fact, Mr. Comer states that a 10 per cent cut in steel prices may represent a 50 per cent reduction in unit profits, thus quickly endangering production incentives unless costs also are out. In other words, Mr. Comer admits the danger of the very medicine he prescribes.

His illustrations of cyclical output and price behavior in the case of steel and knit goods may not prove what he implies. Here we are dealing with commodities of highly differentiated demand elasticities, durable and non-durable. Considering the level of agricultural income in 1933, a cut in price of agricultural implements, or of steel rails for that matter, down to marginal costs might have had only a minor affect on employment or production. What would happen if all prices were cut simultaneously in the durable goods field when demand recedes is anybody's guess. If such price cuts foster expectations of further cuts, price cutting may in fact deepen a depression rather than alleviate it. But if the durable goods producers combine in a simultaneous price-cutting program, businessmen might be liable under the eye of the Antitrust Division. Rather than drastic price and wage cutting when depressions occur, a policy of repeated price and wage adjustments always designed to clear the markets might be more effective.[1]

Mr. Comer implies that the international cartel agreements interfered with our war preparations. But he cites no proof. The Department of Justice has been deluging Congressmen and the public with much testimony, endeavoring to prove that our cartel arrangements with European firms retarded our war effort. Many people take a contrary view without necessarily supporting cartels. Neither our universities nor research agencies have placed as much emphasis on basic research as have the advanced European countries. We have led in applied but not basic research. The testimony of those in the know is that through private international cartel arrangements (which in most cases were similar to completely legal arrangements between domestic companies), we have received far more in the way of know-how, patents, and formulae than we ever gave. Persons interested in national security would be well advised to see to it that the current drive of the Antitrust Division does not dry up the importation of foreign know-how. This is the greatest danger of the present zeal of the Department of Justice. When the facts are published on this particular issue within the next few months, it is probable that Wendell Burge's book and that by Borkin and Welsh will be re-evaluated.

Mr. Edwards' paper appears less open to criticism on the foregoing scores. In both papers some persons may find a regrettable omission of what most students regard as the essence of workable competition; namely, *freedom of entry* into the goods and labor markets. True, Mr. Edwards mentions the importance of keeping open "the channels of opportunity" but most of his analysis ignores this *sine qua non* of a dynamic and progressive society. Since fifty years of antitrust policy have apparently not blotted out collusion and attempts to monopolize, it might be wise to reorient antitrust policy

[1] For a more complete discussion of this view see: *A Program for Sustaining Employment* (Chamber of Commerce of the U.S.A., 1945), pp. 13, 27–30.

in part with a view to fostering those conditions which will multiply the number of new entrants.

This is, of course, the primary problem raised by labor monopolies under current collective bargaining only briefly touched on by all three papers. The temper of the country endorses "genuine collective bargaining," whatever that may mean. What remains is spelling out the meaning of *genuine* collective bargaining. That workers should be privileged to present their views individually or collectively is not denied. But when collective bargaining takes the form of a "conscious withdrawal of efficiency," to use Veblen's phrase, in the form of interference with entrance to the labor market, fostering inefficiency and promoting strikes, where do we cross the boundary between artful persuasion and systematic sabotage of productive employment?

When workers through collective action push wage rates to the point where they necessitate higher prices or freeze workers out of employment, is this a case of restraint of trade or have we become so political minded that we cannot think in these terms any more? If unions confine their collective bargaining to democratic educational efforts, persuasion and negotiation, the modern democratic state would never have to be concerned. The closed shop, high initiation fees, limitations of apprenticeship, closed unions, industry-wide collective bargaining, the strike coupled with mass picketing, force, and intimidation, are for the most part coercive tactics and rely on not "keeping open the channels of opportunity." Considering the importance of wages as a cost in total prices, this issue cannot long be ignored.[2]

All three papers skirted around the edges of this problem but none of them came to grips with it. Here may be a case where the indoctrination of Keynesian economics, which is designed apparently to "decost" wages and view them only as purchasing power, prevents a rational discussion of the job-making process. Thus, Mr. Edwards says that questions concerning labor organizations raise issues which "are not those of the antitrust law, and any public control which is appropriate should be exercised through other instruments." This is rather elliptical reasoning to say the least. Mr. Comer said: "Ordinary labor union activities are exempt from the antitrust laws. Therefore there is no occasion to review here the labor problems which make the newspaper headlines." This appears as a *non sequitur*. Mr. Comer is to be commended for raising an eyebrow with respect to industry-wide collective bargaining, but what does he propose to do about it?

Collective bargaining, coupled with the volume of force which has now become associated with it, probably is inconsistent with the survival of a free society. Many of the "intellectuals" are already re-examining their positions. Thus, a columnist, Eleanor Roosevelt, who formerly said every worker should belong to a union and no one should ever cross a picket line, recently stated: "The strike, which is a weapon of force, should be re-

[2] On the contrary, Sir William Beveridge, in his *Full Employment in a Free Society*, does not ignore this problem saying, "If trade unions under full employment press wage claims unreasonably . . . wage determination will perforce become a function of the state." The issue is more fully discussed in *Can Government Guarantee Full Employment?* (Chamber of Commerce of the U.S.A., 1945).

nounced."[3] The American Civil Liberties Union, generally more interested in unionism than in liberty, in a letter to several labor leaders states: "The only limitations by public authorities on picketing supported by the Union are those to keep traffic open for pedestrians and vehicles, to insure access to places picketed, to prevent the use of fraudulent signs, and to maintain order. The Union has supported mass picketing where these conditions are ment. . . . But no claims of the rights to picket justify the use of force to prevent access to plants on strike by those who are willing to cross picket lines."[4] Since labor unions are the most general monopolistic institutions in our land, it is unfortunate that we have not had the benefit of the views of the speakers on this issue.

Mr. Ezekiel has provided a useful list of private and public interventions. He did not answer the title of his paper. *Private* monopolies and restriction resting purely on private action are feeble and temporal, however, compared to the legal monopolies which would be created by law under his proposals. Nearly every private monopoly which has become of public concern, upon closer examination, turns out to rest on governmental support: labor monopolies, restrictive building codes, monopolistic price discrimination in metropolitan milk sheds, the AAA programs, to mention but a few. That is why *freedom of entry* into the goods market and the labor market backed by government would quickly dispel most of the abuses of monopoly and restrictionism.

But instead of proposing this route Mr. Ezekiel urges more governmental intervention. He wants more government yardsticks, government planning, intergovernmental commodity agreements, industry authorities, government spending for full employment. The European failures of these schemes in pre-Hitler times do not bother him. By 1928 German public authorities controlled over 50 per cent of the national income; yet the greatest and most fatal collapse in history overtook the German economy and the people were driven into opposing and hostile groups. In spite of what Mr. Ezekiel says about the difference between his type of planning and collectivism, the amphibious economy is an unstable economy. His syndicalist program which he calls "producer-government co-operation" finds its prototype in agricultural policy of the last fifteen years. He speaks fondly of the "economic democracy" which evolved this program. Entirely apart from the utter failure to reallocate agricultural resources through this program, the unmanageable surpluses, and the destruction of foreign markets by driving our prices above world prices, question may be raised as to the methods employed. Under the AAA wheat program, for example, stiff penalties are imposed on the farmer for exceeding established quotas even though the grain is consumed upon the farm (*Wickard* v. *Filburn*, 317 US 111, 1942). These programs violate one of the most cherished ingredients of American democratic tradition; namely, the right of a maximum degree of self-determination by minorities. If mere majorities may dictate the behavior of all, then a decision by 51 per cent of the people to put to death the other 49 per cent becomes right and American. Surely this is a perversion of our

[3] *New York Herald Tribune*, Sept. 27, 1945.
[4] *New York Times*, Jan. 21, 1946.

traditions. Now Ezekiel wants to extend the agricultural ideology and programs to industry in general—a cartelization of all industry so that everything will be planned from Washington.

Since he finds that he cannot trust the businessman, he provides that "The 'industry authority' should be an advisory committee, and the final decisions on programs should be made by a career government administrator responsible to government bodies and public opinion." Whether this is incipient Italian Corporatism, German National Socialism, Russian Communism or merely Ezekielism is difficult to discern. Comer and Edwards move in the opposite direction.

Mr. Ezekiel's statement that it is doubtful that the general staff predicted the war requirements more accurately than statisticians and economists would predict demands of consumers and business with stated levels of national income begs the question. Ezekiel further states, "Planning in the open for the public interest[5] and with public accountability is far less likely to become fascistic than planning in the dark, for private monopolistic interests and with accountability to no one." It may be doubted that any competent historian would agree with this question-begging statement. Does he believe that if we applied the AAA technique to industry generally that we could ever have "public accountability" on any clear-cut issue or even on broad general policy except as a bitter voice of protest? European history in the interwar period demonstrated to the satisfaction of most people that this type of programing must be either dictatorial or a failure; that is, a failure in either case.

Under this scheme with the government responsible for wages, profits, prices, consumption, and the allocation of resources—all contained in the Ezekiel program—the issues would be too great and too deep to be consistent with the democratic mood and the democratic method. His program would excite and foster the pressure groups, each anxious to get its share of the spoils—a rampant syndicalism. What would happen to innovations, efficiency, and output under this scheme is easily guessed.

Our traditions have taught us that the society of man is at its best when people are loosely knit together in the free and open market through which they can express their interests in the supply of and demand for goods and services. The open market is impartial, does not differentiate race or color, and respects the individuality of man. Each consumer has a voice, and if the rule of law is maintained the competitive motive protects the consumer, for the most part, without the guiding hand of government looking out for his "welfare." The open market fosters individuality, self-expression and personal achievement and prevents the group from overriding the feelings, the sensitivity, and the personal diversities of human beings.

The open market is not a gift from heaven; it must be sought and promoted. The government has a large and indispensable role to play in creating and sustaining it. Comer and Edwards would foster it; Ezekiel would negate it. Take your choice. We recall the words of the late president of the University of Virginia: "Freedom is not a heritage but a fresh conquest for each generation."

[5] It may be mentioned that the European dictators always justified their public acts in "the public interest."

DOMESTIC AND INTERNATIONAL MONETARY POLICIES

Reported by
JAMES WASHINGTON BELL
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A summary of the discussion of the results of a poll and the substantive problems and possible solutions suggested by monetary questionnaires on domestic and international issues.

Two questionnaires had been submitted to selected panels of specialists by an *Ad Hoc* Committee on Monetary Policy, composed of: Benjamin H. Beckhart, Frederick A. Bradford, Howard S. Ellis, Seymour E. Harris, Leonard L. Watkins, Ray B. Westerfield, and James W. Bell, Chairman. Professor Beckhart acted as Chairman of the round table session and contributed a general appraisal of the answers to the domestic questionnaire. The other participants, who reported on specific segments of the poll, are indicated below:

Domestic Questionnaire

I. Policies of the thirties	
II. 1. Commercial bank reserve requirements	L. H. Seltzer and W. E. Dunkman
2. Government guarantee of loans	W. E. Dunkman and Homer Jones
3. Federal Reserve credit control	J. G. Smith
4. Relation of Federal Reserve System to the Treasury	J. G. Smith
5. Government and private ownership	F. A. Bradford
6. Monetary effects of the federal debt policy	C. C. Abbott and E. W. Swanson
7. Government financing by banks	R. I. Robinson
8. Federal budget policy	
9. 100% reserve money plans	L. L. Watkins (E. C. Simmons)
10. Branch banking	
11. Inflation	

International Questionnaire

I. Postwar exchange rates	R. Nurkse and M. E. Garnsey
II. Exchange controls	I. de Vegh
III. Freedom of international payments	I. de Vegh
IV. Impending scarcity of dollar exchange	C. R. Whittlesey (H. Furth)
V. British external debt and balance of payments problems	S. E. Harris
VI. Foreign loans and investments	J. P. Young

A description of the purposes of this experiment, the procedure in drafting the questionnaires, the selection of the panel of members to whom the questionnaires were sent, and an interpretation of the results so far as method and extent of agreement and disagreement are concerned are matters treated in the report of the Committee on Monetary Policy in the session on Economic Opinion and Public Policy. We are here concerned with the substantive results of the poll, an analysis of what is back of the questions, and an interpretation of the answers in

the light of what might have been expected by those who helped formulate the questions. The two questionnaires will be treated separately.

THE MONETARY QUESTIONNAIRE ON DOMESTIC ISSUES

The domestic questionnaire was sent to a panel of 118 specialists, about half of whom answered. The results of the 54 answers received in time to be included in this analysis are presented in the tabulation below. The column at the left indicates the percentage of favorable or Yes answers to the total answers received on each question. The bold-faced figures represent the agreements of 75 per cent or more Yes answers and 25 per cent or less Yes answers referred to in the Opinion Report. The figures in the Comment column of question II indicate, first, the total number of answers which were in some respect qualified, followed by figures showing the number of such qualifications by those answering Yes and No respectively. These figures were taken from the work sheets and transcribed on a copy of the questionnaire itself which is here reproduced.

Monetary Questionnaire on Domestic Issues

I. Do you think that the following public policies or plans (a) were good (basically sound economic) ideas when adopted? (b) were bad when adopted? (c) were well handled? (d) were badly handled? (e) should be continued or revived (yes or no)?

Check appropriate columns

(Distinguish "*points of view*" and "*judgments* based on careful study")	When Adopted			Handled			Continued or Revived		
	% Yes	Good A	Bad B	% Yes	Well C	Badly D	% Yes	Yes E	No E
1. Silver subsidies (1933–)	**2**	1	53	**19**	6	26	**0**	0	48
2. Dollar devaluation (1933–)	35	19	35	28	10	26	30	13	30
3. President's gold powers (1933–)	39	20	32	39	14	22	**18**	7	33
4. Deficit financing (in the thirties)									
a. Pump priming for recovery	69	34	15	**13**	5	34	45	19	23
b. Compensatory spending	72	33	13	**16**	6	31	64	27	15
5. Low money rates (since 1930)	71	31	13	67	24	12	57	22	17
6. FDIC (1933–) guarantee of deposits ($5,000 coverage)	**96**	53	2	**100**	47	0	**100**	52	0
7. Provisions of the Thomas Amendment, 1933									
a. Legal tender provisions	63	27	16	64	18	10	58	22	16
b. Provisions empowering Federal Reserve banks to buy $3 billion U. S. securities without penalties for deficiency in reserves	50	23	23	72	20	8	31	13	29
c. Power to issue $3 billion greenbacks (repealed June 12, 1945)	35	17	36	62	20	12	**19**	9	38
8. Lend-lease (1941–45)	**100**	42	0	**95**	36	2	30	11	26

II. Indicate whether you approve (column 1) or disapprove (column 2) the following plans or proposals. If you do not want to express your opinion, or wise to qualify your answer, check or otherwise indicate in column 3.

	% Yes	1 Approved	2 Disapproved	3 Comment Total: Yes/No
1. *Commercial bank reserve requirements*				
a. Reduction of reserve requirements of *Federal Reserve banks* against both notes and deposits				
(1) to 25% (as provided for in the Act of June 12, 1945)	**80**	37	9	13:10/2
(2) to 10%	27	9	24	13:4/4
(3) to 0%	35	13	24	13:6/4
b. *Removal* of reserve requirements against notes, but retaining them against deposits	**12**	5	38	10:3/6
c. *Substitution* of other *bench marks* for reserve requirements				
(1) a fixed figure for gold certificates, e.g., $10 billion or $5 billion	**0**	0	37	7:0/5
(2) a volume figure of payments	**11**	4	31	13:2/5
(3) a significant change in the commodity price index, e.g., 10% in a period of a year or less, or 1% per month for two months or more	**24**	9	28	12:2/4
(4) a similar change in a general price index (including real estate and security prices)	**18**	6	28	7:2/0
d. Present Federal Reserve Board control of *member bank* minimum reserve requirements (within top and bottom limits as provided in the Act of 1935)	**85**	34	6	10:7/1
e. Doubling present *member bank* reserve requirements	28	12	31	9:4/2
2. *Government guarantee of loans; federal financial aid;* and *competitive agencies*				
a. Government guarantee of loans by Federal Reserve banks				
(1) to business and industry (as proposed in the Spence-Wagner Bill)	**25**	11	34	10:4/4
(2) to consumers (with implicit subsidy, e.g., food stamps plans)	**18**	7	33	12:4/2
(3) above answers qualified with respect to cyclical or secular considerations	55	16	13	10:4/3
b. Direct government lending (alternative to guarantee of loans)				
(1) to business and industry	**21**	9	34	12:7/1
(2) to consumers	**9**	4	40	7:3/2
c. Guarantee of real estate loans:				
(1) FHA	**81**	38	9	11:8/2
(2) HOLC	73	30	11	9:7/0
d. Federal aid by government agencies:				
(1) RFC				
(a) prewar financing				
i) participation	71	27	11	12:7/1
ii) direct loans	64	25	14	11:5/2
(b) wartime financing				
i) participation	**90**	36	4	8:4/1
ii) direct loans	**87**	33	5	8:4/1
(2) Export-Import Bank				
(a) pre-1945 functions (to stimulate U. S. exports in the narrower sense)	62	24	15	4:2/1
(b) post-1945 functions (loans to aid economic relief and reconstruction abroad)	**87**	38	6	9:6/1
(3) To agricultural co-operatives	53	20	18	6:3/0
(4) FDIC guarantee of deposits—full coverage (cf. I-6)	52	25	23	8:2/3
3. *Federal Reserve credit control; extension of powers; consolidation of supervisory and administrative agencies*				
a. Federal Reserve credit restrictions on				
(1) consumer credit (regulation W of the Federal Reserve Board)	**77**	36	11	8:4/2
(2) security margin requirements (regulations T and U)	**90**	42	5	3:2/0
b. Extension of Federal Reserve selective credit control to				
(1) real estate loans	50	20	20	9:4/2
(2) commodity loans	49	19	20	6:3/2
c. Supplementing Federal Reserve quantitative credit controls by taxation and government expenditures (fiscal policies)	**87**	39	6	14:8/2
d. Consolidation of governmental supervisory and administrative banking agencies, i.e., FDIC, the Comptroller of the Currency, and the Board of Governors of the Federal Reserve System into one agency				
(1) If you approve the consolidation, would you favor having one the agency under the administration of				
(a) the Treasury Department	37	10	17	13:1/5
(b) the Board of Governors of the Federal Reserve System	71	25	10	13:5/2
(c) the FDIC	**14**	3	18	11:0/4
(2) Would you approve of the consolidation if this agency were to exercise its powers (e.g., by relaxing bank examinations in times of depression, tightening examinations in periods of boom, etc.) in an attempt to stabilize business	55	22	18	15:5/2

	% Yes	1 Ap-proved	2 Disap-proved	3 Comment Total: Yes/No
4. *Relation of Federal Reserve System to the Treasury in peacetime*				
a. Complete *independence* of the Federal Reserve System	**20**	7	28	11:1/5
b. Treasury central banking *control*, e.g., final determination of credit policy by the Treasury	29	10	25	7:2/3
c. Independence of Reserve control but with consultation with Treasury and with consideration given to Treasury policies with respect to debt management, etc.	**95**	38	2	14:9/0
5. *Government or private ownership and operation of commercial banks*				
a. *Federal Reserve banks*				
(1) private member bank ownership as at present	**85**	38	7	4:2/0
(2) Federal Reserve purchase of its own stock	37	11	19	3:0/1
(3) mixed management as at present	**78**	35	10	6:3/1
(4) distribution of profits as at present	69	24	11	5:2/0
(5) recapture of most of the profits by the Treasury	49	19	20	6:3/1
(6) subordination by Federal Reserve banks of business financing to Treasury financing				
(a) in peacetime	**9**	4	42	4:0/2
(b) in time of war	**86**	37	6	7:4/0
b. Government ownership and operation of *all commercial banks* in the United States	**4**	2	49	6:1/5
6. *Monetary effects of the federal debt policy*				
a. Continued low interest cost of federal debt induced by				
(1) large use of short-term obligations	33	13	26	8:3/2
(2) enforcement through various fiscal measures of a "pattern" of interest rates for federal securities	39	15	24	4:1/1
b. Protection of owners of securities against falling prices resulting from a rise in interest rates	32	13	28	12:5/2
c. Continued federal control of short-term rates and relaxation over long-term rates, allowing latter to seek own level	31	11	25	15:4/6
d. Continued federal control of prices of long-term governments; and relaxation over short-term rates, allowing latter to seek own level	**20**	7	28	12:4/2
e. Continued reliance upon use of large amounts of short-dated obligations	38	15	25	7:3/1
f. Increased reliance upon short-dated obligations	**18**	7	33	6:2/2
g. Increased "stratification" of the public debt, through greater use of special issues (purchasable by only certain types of buyers; with special privileges attached, etc.)	45	20	24	8:4/2
h. Simplification of debt structure; e.g., consols	59	23	16	6:0/3
i. Announcement by Treasury that primary objective of debt policy is				
(1) protection of the government's credit and gradual but steady reduction of debt	63	27	16	12:5/3
(2) mitigation of price level disturbances	54	20	17	12:4/4
(3) full employment	43	19	25	10:5/4
j. Greater unification of fiscal responsibility and centralization of fiscal operations and of fiscal agencies under a single cabinet officer	**90**	35	4	9:4/1
k. The elimination of state and local tax exempt securities				
(1) by Constitutional amendment	**95**	35	2	15:11/0
(2) by Act of Congress	**83**	28	6	6:6/0
(3) by other means	61	14	9	7:7/0
7. *Government financing by banks*				
a. Reliance upon commercial and Federal Reserve banks as residual underwriters for the federal deficit (with the effect of "monetizing" a substantial part of debt)	59	24	17	20:14/1
b. Direct sale of government's securities to Federal Reserve banks				
(1) to the $5 billion now permitted under the War Powers Act	45	14	17	9:7/0
(2) without limit	45	18	22	11:8/1
(3) all direct sales prohibited	31	13	29	4:1/1
8. *Federal budget policy*				
a. An annually balanced budget	26	10	29	11:3/4
b. A cyclically balanced budget	**77**	33	10	17:9/4
c. Taxes fixed with reference to proposed expenditures	73	24	9	10:4/0
d. Expenditures fixed with reference to the burdens involved in providing the necessary tax revenue	**77**	26	8	10:5/0
e. Aggregate expenditures to be reduced in depression years	**10**	4	35	6:0/2
f. Revenue system to be sufficiently diversified to result in reasonable stability of the receipts regardless of economic conditions	35	14	26	8:1/6
9. *100% reserve money plans*				
a. The early adoption of				
(1) Irving Fisher's plan for 100% cash and bond reserves against demand deposits (1945 version)	**23**	9	30	13:2/5
(2) earlier plans for 100% cash reserves	**16**	3	30	7:0/5
(3) some modification of 1 or 2	**35**	14	26	12:5/5

	% Yes	1 Approved	2 Disapproved	3 Comment Total: Yes/No
b. If you *oppose* early adoption, would you approve or disapprove "a,2 or a,3" (indicate which one in column)				
(1) if adopted piecemeal	**14**	3	19	5:2/1
(2) if other nations agree to co-operate	**10**	2	19	4:1/1
(3) if international monetary co-operation breaks down	**9**	2	21	5:2/1
(4) if serious inflation develops in the United States	28	7	18	7:4/1
c. If you *favor* any 100% plan, do you favor because you believe such a plan will (*Yes*, in approve column; *No*, in disapprove column)				
(1) facilitate the management of the public debt and save interest	68	13	6	4:1/0
(2) stabilize government bond prices	**13**	2	13	4:1/0
(3) curtail bank earnings	43	6	8	3:0/0
(4) prevent bank failures	58	11	8	4:3/0
(5) will be conducive to effective control over quantity of money	72	18	7	4:3/0
(6) aid in stabilization of a selected index of prices	62	13	8	6:3/1
(7) prevent booms and depressions	45	10	12	11:9/1
(8) serve as stepping stone to nationalization of banks	**12**	2	15	3:0/1
(9) increase interest rates	**18**	3	14	6:2/1
10. *Branch banking* (indicate, if possible, the order of your preference which more nearly matches your ideas)				
a. As at present	42	10	14	8:3/1
b. State-wide plan	62	16	10	6:5/0
c. Regional plans	**90**	25	3	7:7/0
d. Nation-wide plans	62	15	9	8:7/0
e. Complete abolition of branch banking	**5**	1	17	3:1/0
11. *Inflation* (indicate which is most in accord with your views)				
a. Considerable rise of prices is				
(1) probable	**93**	26	2	7:4/1
(2) possible	**97**	28	1	3:3/0
(3) unlikely	60	6	4	3:2/0
b. If *probable* or *possible*, it will most likely be due to				
(1) scarcity of goods coupled with ample funds with which to make purchases	**98**	44	1	17:12/0
(2) loss of confidence in the soundness or stability of the dollar	52	12	11	9:5/1

Analysis of Results—Question by Question

The question-by-question analysis which follows is made in the light of comments of the respondents, as interpreted by the writer and the experts who had a hand in formulating the questions.

Question I. Do you think the following public policies or plans (*a*) *are good, etc.*

This question is an adaptation of the Elmo Roper-*Fortune* survey poll of December, 1940, which was addressed to business executives and concerns itself with past policies. The answers to this question and to the Roper survey are not quantitatively comparable, both because of the timing of the polls and because an effort was here made to avoid phrasing that is "loaded." For instance, "obsolete but right once" and "always bad" were changed to "good or bad when adopted." "Good idea badly handled" was revised to "well or badly handled." A rough comparison of the results shows that economists and businessmen do not agree on all issues. The businessmen give stronger support to silver subsidies but condemn dollar devaluation and the President's gold powers as well as pump priming and low money rates. The economists, on the other hand, think pump priming and compensatory spending desirable under certain conditions, but agree that it was badly

handled in the thirties; a majority favor the easy money policy when adopted, as handled, and (less strongly) they wish to continue it (a result which is not consistent with the opposition voiced in question 6 to the continued enforcement of a level and pattern of interest rates).

The last three questions were not included in the Roper poll, but they fit into the same pattern. Economists approved quite wholeheartedly the FDIC guarantee of deposits up to the $5,000 coverage. A majority favored making all kinds of money legal tender. (One wonders if legal tender distinctions have lost all usefulness.) Fifty per cent of those answering approved Federal Reserve powers to buy three billion United States securities in 1933; 72 per cent claimed that this policy was well handled (because not used?); but only 31 per cent favored the continuation of this power (cf. 7,b,(3), where only 31 per cent favored prohibition of all direct purchases). The power to issue greenbacks was approved by a minority (35 per cent), was considered well handled (because not used?) by 62 per cent, and 19 per cent apparently opposed its repeal. Lend-lease received unanimous support: 95 per cent considered it well handled; 30 per cent would continue lend-lease.

According to Professor Beckhart, one conclusion which might be drawn from the first series of questions is that majority opinion has less confidence in monetary stimulants to economic activity than in credit and fiscal stimulants. Inasmuch as these policies are all closely interrelated and interdependent, it would be interesting to explore further the reasons for this divergence in point of view.

Question II. Indicate whether you approve or disapprove, etc.

This question is concerned chiefly with future plans and proposals. The sections are here treated seriatim.

1. Commercial bank reserve requirements. The purpose of this series of questions was to find out what the sentiment is among economists concerning recent changes and proposals in reserve requirements affecting both the central and member banks.

Some 80 to 85 per cent of the respondents approved present requirements; namely, the recent reduction affecting the Federal Reserve ratio and present member bank reserve requirements. Only a small minority approved a further lowering of reserves against Federal Reserve notes and deposits at this time. "It is difficult to understand," said Professor Beckhart, "why the respondents should have favored the lowering of reserve requirements to 25 per cent, which was done to remove any impediments in the way of cheap money policy, and then should have opposed a further reduction in requirements. The answer probably lies in the belief that the first reduction, impelled by wartime credit expansion, should not be repeated in time of peace." Other proposed innovations of substituting figures reflecting symptoms of credit

expansion received no enthusiastic support. According to Professor Beckhart, opposition to the use of price index numbers as criteria of reserve requirements was probably "based upon the developments of the decade of the twenties, which undermined the doctrine, then widely held, that price indices should be used as the principal if not the sole criterion of central bank policy." Professor Seltzer stated that he is by no means sure that all of the respondents regard reserve requirements as significant primarily for determining the amount of money that could be created; he thinks that the questions under subhead c were therefore confusing to some of them. Professor Dunkman hazards the interpretation that the general apathy toward the several concrete proposals indicated that alterations in reserve requirements are to be used only to meet extraordinary conditions.

A number of respondents expressed a need of enlarging the Federal Reserve Board powers with respect to member bank reserves, but only 28 per cent favored doubling the present figures. Three respondents took occasion to "plug" for 100 per cent reserves in connection with this question. Three others did not think these proposals significant, and two regretted the omission of questions on the use of government securities as commercial bank reserves against deposits.

Comments were made both by those who favor the removal of all legislative requirements and those who see a need of checks on administrative discretion with respect to this instrumentality of control. One respondent suggested that a question might have been asked concerning the desirability or undesirability of frequent changes in reserve requirements.

By and large, answers to these questions seemed to reflect economists' attitude favoring reserve requirements, but requirements with some flexibility permitted administrative authority.

According to Professor Seltzer, some of the more vital current questions on this subject have been omitted:

> How can member bank reserve requirements be doubled without accompanying action to take care of the government securities that would have to be sold in order to supply the additional reserves? Does the heavy concentration of member bank assets in government securities preclude the use of quantitative credit controls by the Reserve banks under present conditions? How important are the nominal reserve requirements of member banks when the latter possess 75 billion dollars of marketable government securities? Do quantitative controls through reserve rquirements provide a satisfactory means of limiting excess credit expansion to business, in view of the importance of maintaining a stable bond market?

2. *Government guarantee of loans, etc.* These questions were designed to find out what reservations economists have concerning government loans and the financial activities of government credit agencies.

A conservative attitude dominated these answers. Guarantee of real estate loans, i.e., FHA and HOLC; and the operations of the RFC and the Export-Import Bank all received fairly strong support. RFC

participation financing is preferred to direct loans, and wartime financing received greater approval than prewar financing (which preference surprised some of our analysts). Post-1945 Export-Import Bank functions are more popular than pre-1945 functions. The extension of government lending and guarantee of loans to domestic business and to consumers does not appear to be favored by the respondents, although the replies were qualified with respect to cyclical fluctuations. One respondent expressed surprise at the strong opposition to the Spence-Wagner Bill, since this is designed to benefit small business and hence might be expected to be popular. It is pointed out by other respondents that V and VT loans have not been large and that the poll on this question is therefore not significant. Item a,(2) does not logically fit in this place, since food stamp plans are not "loans." However, as government aid to consumers it receives the support of a few respondents as a relief measure.

Federal aid to agricultural co-operatives drew a fairly evenly divided vote, qualifications indicating that such aid depends upon needs, should be limited, etc. This is not a single question, since there are various co-operatives and needs should be determined in each case.

In the light of almost unanimous approval of FDIC guarantee of deposits up to $5,000 in question I,6, the 52 per cent Yes on full coverage is interesting. Dr. Homer Jones considered the results inconsistent since "through its powers to make loans or purchase assets to effect a merger, the Corporation does in fact to a very great extent now supply 100 per cent deposit insurance." Assuming that present coverage is limited to $5,000, the question might have called for answers on increasing dollar amounts; for instance, to $10,000, to $25,000, and $25,000 and over.

Professor Dunkman pointed out that the answers to these questions are so positive in some respects and negative in others that one would like to ask "Why?" to each reply. The ubiquitous participation of government in banking activities is an outstanding current phenomenon, and its full implications should be thoroughly explored with respect to the reservations which economists have regarding government credit agencies. It would also be interesting to explore the reasons which prompted the respondents to favor existing government guarantees and lending operations and yet oppose a further extension of these activities. According to Professor Beckhart, "this divergent point of view may result from the fear that a further extension of government activities of this character will undermine the private enterprise system (as indeed it might) or from a very human attitude of mind, which is to voice confidence in existing and tried institutions and to express skepticism of the projected and untried."

3. Federal Reserve credit control, etc. The limitations of Federal Reserve powers and the form which such powers should take always present good controversial material. Questions a and b present the old debate of qualitative versus quantitative control in a new form. Qualitative controls are now spoken of as "selective" controls. The present controls of consumer and speculative credit are approved by comfortable majorities, the latter by a large majority. Professor J. G. Smith considered this an expected result, since centralized or quantitative control is more appropriate for an integrated mechanism like the securities market, which deals with more or less homogeneous elements, than it is for the widely scattered consumer credit mechanism, with its various products. The qualitative control of credit by banks and the credit departments of retail outlets is considered by many economists quite adequate in the case of consumer credit. Some comments limit such approval by indicating that these should be used in times of emergency only. They are objected to on the grounds that such controls interfere with the markets and the price system.

An extension of Federal Reserve selective credit controls to real estate and commodity loans shows a 50-50 vote, this small percentage being attributed by Professor Smith to the reluctance which many feel to more centralized control, plus the factors to which he referred in the preceding paragraph. Despite expressed fears of inflation, these economists apparently do not strongly favor enlarged powers in this direction. Some express concern about the great difficulties of administration of such controls by the Federal Reserve authorities.

c. There is fairly general agreement (87 per cent Yes) that Federal Reserve and Treasury policies must be co-ordinated, whether Reserve controls be supplemented by fiscal policies or vice versa. Many expressed dislike of the word "supplementing." Professor Smith points out that caution should be used in interpreting this result:

> Many might vote approval on the proposition because they realized that fiscal policies are necessarily interwoven with the credit system and are therefore a necessary part of credit control; but their admission of this fact might be reluctant and they may regard the presence of fiscal control as a necessary evil. Their approval on this question might therefore merely signify that they favor a proper co-ordination of fiscal policies with appropriate Federal Reserve controls, which they regard as the more important of the two. Thus the affirmative answer on this question may not indicate a majority of economists in favor of the ideas advanced by advocates of the compensatory principle applied to federal expenditures; it may not indicate a majority of the economists in favor of a manipulated market rate of interest. It might have been well to have had a subdivision of this question in order to clarify these points of view among the economists.

d. The proposal to consolidate supervisory and administrative agencies seemed to frighten a good many of our respondents. The principle of simplification of administration was approved, but a more plausible plan would be to provide ways and means of achieving effective co-operation (at least this thought was suggested by several

respondents). A merger of Federal Reserve and Comptroller of the Currency was favored by one correspondent. In case of consolidation, the Federal Reserve Board was considered the most logical agency. In explaining the 71 per cent favoring centralization under the Federal Reserve Board and the minorities of 37 per cent and 14 per cent favoring similar consolidation but centralization under the Treasury Department and the FDIC, respectively, Professor Smith explained that the larger vote reflects a "desire to have a centralized banking control independent of government." He adds:

> But a substantial minority evidently desire the still greater concentration of supervisory power that would result if these controls were under a single rather than under a more or less federated agency. . . . That the majority favor the Reserve Board for this purpose may reflect the realization that bank supervision is a form of qualitative rather than quantitative control; and that for qualitative control of credit it is desirable to have federated but co-ordinated groups of supervisors who would, by geographical or product specialization, be qualified for this type of administration.

The smaller minority, he stated, presumably visualized the advantages of further specialization of function; i.e., allocating quantitative control of credit to the Reserve Board and the qualitative aspects of credit control to the FDIC, whose supervisory activities involve, after all, the quality of bank assets.

Strong dissent was expressed in some of the comments to examinations being used as a control or as an instrument to stabilize money and credit and business cycles, and fear is revealed of the possibilities of abuse of powers if consolidated in one agency. This question provoked a large number of comments. Some suggest ulterior motives in the proposal.

4. *Relation of Federal Reserve System to Treasury in peacetime.* Here again, as in question 3,c, attention is called to the intimate relationship between private and public finance. Only 20 per cent approve independence of the banking system, which, according to Professor Smith, "undoubtedly reflects the historical background of distrust in modern democracies of independently acting financial institutions and the belief that they are quasi public and should be subject to governmental control." He points out that the somewhat larger minority (29 per cent) favoring Treasury central banking control presumably desire more power to the central agency exerting quantitative control over the credit system. But he warns that "it is virtually impossible to get a consistent and continued policy" with such divided control.

A very large majority (95 per cent) approve what may be described as the "present status of affairs." According to Professor Smith, this "presumably reflects the conviction that so far as possible the quantitative control of credit should be in the hands of an agency partially independent of the government, so that economics rather than politics will prevail, realizing at the same time that whatever is done will necessarily be related to government fiscal policies. The final policy adopted

will in every case be a compromise between the two interests—in peacetime perhaps favoring the economic considerations, while in wartime these give way to political considerations." These ideas are expressed with various modifications by respondents in their comments. One expert maintains that "there must be a possibility of conflict, for Treasury policies as a borrower may conflict with policies needed to control the total economy." Practically, central banks have little independence, especially in critical periods. Another would center monetary and fiscal policies in the Treasury or a similar agency having a functional relationship to the Chief Executive; but would not trust these powers in the present Administration—obviously not an economic consideration (cf. 3,d). Still another states that "functions need more independence of political considerations." Apparently we are not yet ready to follow Australia's recent example.

5. Government or private ownership and operation of commercial banks. The nationalization of central banks and commercial banks in some foreign countries, especially England, prompts interest in testing sentiment in this country. Professor Bradford considered that "the taking over of the central bank by the government in almost any other country than England would have caused scant comment. . . . The Bank of England, however, since its establishment in 1694, has been the outstanding example of a central bank which operated in complete, although not unco-operative, independence of the government." In the United States, many have used foreign precedent in urging government ownership and operation of the Federal Reserve banks. For the past nine years, Representative Jerry Voorhis of California has advocated that the Reserve banks be made "an institution belonging to the entire American people."

Professor Bradford maintains that "from a purely economic or financial point of view, nothing much is to be gained or lost by government ownership of the Federal Reserve banks." Except for the 6 per cent paid to member banks on their stock holdings, government ownership would effect no change, unless an extension of government ownership to all banks might be inspired by such a move. This he considers would be "a major catastrophe." With regard to management and operation, the Board of Governors has, since the passage of the Banking Act of 1935, actually run the System. A large majority favor the *status quo* with regard to private ownership of Federal Reserve banks, and there is little support for nationalization of all commercial banks. One out of three respondents favored Federal Reserve purchase of its own stock, but the vote was not heavy. Mixed management, distribution of profits, and the domination of Treasury financing as at present all received strong approval. Some respondents see no difference between

recapture of most of the profits by the Treasury and distribution of profits as at present, and some justify recapture of a larger proportion during times of war and depression than in peacetime. One expert believes that the Federal Reserve banks "should be strictly accountable for its income, expenses, and profits to Congress." Some interpreted question 6 as referring to direct loans in competition with member banks and stated that "Federal Reserve banks should not finance business at any time." What was meant, obviously, is the degree to which the resources of the Reserve banks should be put at the disposal of the Treasury or of business, and the total vote recognized this.

A 100 per cent reserve money supporter claims that 5,b, as well as 1 and 6, by-pass crucial issues; e.g., separation of commercial bank loan and monetary functions.

6. *Monetary effects of the federal debt policy.* Of great interest were the replies to these questions. The difficulty which many respondents found in answering them without elaborate qualifications illustrates, according to Professor Abbott, "the fact that economists seldom agree on matters of public policy and the difficulty of using questionnaires effectively as regards technical subjects." However, he later states, "it may be significant that two-thirds or more of the replies to 7 propositions, almost half of the 16 questions, appeared to be in general agreement." Some general qualifications covering all questions indicated that "some regulation is desirable, but there has been too much of a tendency to manage during the past twelve years." Others find the questions "fail to provide room for expression of any of the more defensible points of view."

a, f. Answers to these questions indicate that our economists do not generally favor low rates when induced by Treasury control (which is somewhat in contrast to the answers on low money rates since 1930 in question I,5). Professor Abbott points out that the answers to this question and the very considerable disapproval (82 per cent) of an increased use by the Treasury of short-term securities (question f) are both contrary to what appears to be present Treasury policy. One respondent says that we have created "a dilemma which spells inflation." Some favor continuing low rates "as long as we can" and "as at present" and "during wartime." Doubts are expressed that short-term governments can be sold outside of banks. Dr. Swanson, comparing answers to questions I,5 with a, e, and f of II,6, concludes that "with two exceptions, the comments either cast doubt on the possibility of doing much with short-term obligations for the purpose of maintaining the Treasury policy or else place limitations upon their use."

b. A majority of our respondents (68 per cent) feel that owners of securities should be made to take their chances on falling prices caused by rising interest rates. Professor Abbott, expressing surprise, suggests

that "relatively few of the respondents are connected with financial institutions and many may not have fully appreciated the import of the question or the extent to which the federal debt is held by commercial banks and savings institutions." Dr. Swanson comments that "here is clearly the kind of answer to be expected from the economist and not from the layman, the banker included." Examples of the type of qualifications made by respondents are: "No, unless all rates are cut to short term"; Yes, "support at say 96"; "offer some protection to holders of nonmarketable securities"; "protect banks in exchange for certain concessions"; Yes, "as a means to prevent Treasury dominance of entire long-term rate structure."

c, d. These compound questions were split in some answers, the first part being answered No and the second part Yes in several instances. More faith is evinced in the control of short rates (31 per cent Yes) than of long rates (20 per cent); but some considered separate treatment of short and long rates artificial and impracticable. Dr. Swanson considered these questions difficult to analyze because of the way in which they are stated. He observed:

> It would appear that a substantial majority of the respondents do not favor control of either short-term or long-term interest rates. If the interpretation is correct, it means that this majority is unwilling to accept present debt-managing policy, which is in line with the opposition to the low interest rate policy of the Treasury through short-dated obligations. However, these two questions appear contradictory. The comments suggest the need of a third alternative: control of neither short- nor long-term rates.

e. Continued reliance on large amounts of short-dated obligations was considered of doubtful wisdom, but 38 per cent deemed such practice "necessary for a time" and some countered by asking, "What else?" Increased reliance on short-dated obligations was even more strongly disapproved. "The budget must be balanced some time soon."

g, h. A fair majority (55 per cent) opposed an increased "stratification" of the debt and favored (59 per cent) a simplification through the use, for example, of consols. Some comments suggest special nonmarketable issues for banks (to ease the transition to a perpetual debt?); also issues for life annuities, "but with government trust funds highly marketable issues." Some who objected to simplification commented: "doubt practicability" and "not yet."

i. Many respondents disapproved any announcement of Treasury objectives; considered the question bad. Objectives (1), (2), (3) are not exclusive; many approved the combination, with most of them favoring protection of the government's credit and debt reduction. Some wished to separate protection of credit and reduction of debt. Others approved reduction, but not steady reduction. Many of those objecting to (2) and (3) commented on the undesirability of single objectives. Dr. Swanson would like to have had questions more explicitly distinguishing "whether

debt management should be related to a monetary stabilization program in the traditional sense or to the current conception of a program wherein broad monetary and fiscal powers are applied." A majority opinion (57 per cent) opposed the doctrine that debt policy should be used to maintain full employment.

j. Here, as in question 3,d,(2), the principle of centralization of powers and responsibilities meets the approval of the majority (90 per cent). The character of the qualifications also is the same. For instance, "favor unification but not under Cabinet officer"; "Yes, but not under a political appointee"; "keep banking examinations separate"; "Yes, but with Federal Reserve still responsible for money market."

k. Most economists seem to favor the elimination of tax-exempt securities. It seems to be merely a question of means how this can best be accomplished. Constitutional amendment seems preferred and safest in the long run (though some say this is not necessary). Several qualified their answers; e.g., "apply to new issues only," "future issues only." One expert says elimination by constitutional amendment is "not feasible," by Act of Congress "not effective," and that he knows "of no effective means."

Commenting on the answers to question 6, Dr. Swanson stated that "taken all in all, the net results of the comments evidence careful thinking on the part of the respondents. In the period of transition from war to peace, when there is an extremely large national debt and an unusual monetary situation, it is difficult to take a doctrinary view on monetary policy, and this appears to be the general attitude governing the answers. The replies are nonetheless those that the economist and not the layman would give."

Professor Beckhart's own interpretation of the majority opinions with respect to public debt policies treated in this question is "that the respondents are in favor of the refinancing of the floating debt and feel that interest rates should on the whole be free to seek their own levels. Both are parts of the same pattern. The floating debt has increased, in part, by reason of the structure of interest rates; i.e., by reason of the fact that short-rates rule below long-rates. The unpegging of the interest rate curve will mean that short rates will either be equal to or rule above long rates, a circumstance which will facilitate the refunding of the floating debt."

7. *Government financing by banks.*

a. Three out of five respondents approved reliance on banks as residual underwriters for the federal debt, even though this involved monetizing a substantial part of it. Dr. Robinson maintained that less can be concluded from the numerical count than from the comments. Half of those answering wrote comments, chiefly to the effect that this

was "another dilemma," "dislike this but think it inescapable," "practical necessity," "see no alternative," "Yes, necessary but keep it as small as possible." Said Dr. Robinson, "These comments grew out of the background of recent events. They were prepared soon after the end of the war. That the increase in the war debt should have taken place without some monetary expansion seems inconceivable, so that financing through the banking system was inevitable." He points out that another group, joining in the affirmative replies, "may be identified with so-called 'functional finance.' The comments of this group were not much colored by wartime experience, but rather by that of deflation and depression. . . . They hoped to secure whatever additional fillip there might be to the initial stimulation of a deficit by adding to it monetary expansion." Dr. Robinson mentioned that still a third group, though a small one, joined in the affirmative replies; namely, those aiming toward 100 per cent reserve banking. According to Dr. Robinson:

Some divergent interpretation of this question may have arisen from the use of the words "residual underwriters." This phrase has color; it is not just a form of neutral description. . . . There is a clear implication that some prior effort has been made to sell the obligations resulting from government deficits to nonbank buyers. Since a deficit (except for variations in Treasury cash) puts additional funds in the hands of businesses or individuals, the failure to sell all of the obligations to them means that these groups have elected to retain some of these added funds in cash rather than as nonmonetary liquid assets; i.e., federal government securities. Thus so-called "residual" financing turns out to be a process of meeting the demand for cash balances. . . . The question is not whether the banking system should be a residual underwriter of government deficit, but rather one relating to the public demand for cash balances.

b. A majority voted direct sale of government securities to Federal Reserve banks, both with respect to the five billion now permitted and without limit. However, an even larger majority voted against prohibiting all direct sales. This raises doubts about respondents' being conscious of the implications. Direct sales short-cut the market and are an easy way to inflation unless compensatory checks are introduced.

Not all agree to this; for example, one comment states, "What about indirect sales; emphasis on direct sales is not justified." Another respondent pleads for the "functional finance" approach and justifies direct sales to Reserve banks without limit "except with regard to maintenance of price level." In the opinion of Dr. Robinson, the responses to this part of the question present "a very confusing array" and the annotated comments do not serve to clarify the issue. Continuing, he stated that:

One group, evidently having in mind the great ease with which government securities can be channeled from the Treasury to the Federal Reserve banks with only a brief pause in the open market, preferred to treat the issue as trivial. Evidently this group took a rather poor view of central bank acquisitions at all, however, since this point was mentioned more often by the disapproving than by the approving respondents. Another group apparently viewed the issue in the light of recent actual experience. Since direct sales have, in fact, been made only for day-to-day financing, usually in anticipation of tax or other receipts, no important issue of principle has in fact been involved. The matter has been one of convenience and short-term money market stabilization. Apparently on these grounds this second group approved the

power but also believed the issue to be relatively unimportant. The third group was that which regarded central bank purchases directly from the Treasury as an approach to 100 per cent reserve banking and divided their votes, approving or disapproving as they viewed the scheme in its broader aspects.

8. Federal budget policy.

a, b. Some answered Yes and No to both, which is not inconsistent. In the light of recent history, an annually balanced budget requirement would certainly not be realistic. Those favoring it emphasize desirability of getting a balanced budget soon. One favors a double budget, annual and longer term. Many consider cyclically balanced budget "not feasible," "not possible." One would favor it "if political leaders were not cowards and/or crooks."

c, d. Some considered these questions ambiguous; questioned the meaning of the words "reference" and "necessary." But most respondents interpreted questions to mean emphasis on determination of expenditures first, then raise the necessary money versus raising money first, then spending it. In public finance, both aspects are significant and budgets represent a compromise.

e. This question was considered ambiguous by some, but most respondents answered in the sense that depression is not a time for the government to economize on expenditures, though the nature of such expenditures might of course be different.

f. The issue here is not clearly drawn between those who favor taxation for revenue and those who wish to use it as an instrument of social control, but the vote reflects sentiment in favor of the latter.

9. 100% reserve money plans. The so-called "100 per cent plan" has been give a variety of meanings. The plans initially proposed by Professors Soddy, Simons, and Fisher contemplated the exchange of commercial bank assets for cash. This exchange would have signified the virtual surrender of the lending and investing function by commercial institutions and have necessitated the assumption of this function by other middlemen. The more recent version follows the idea advanced by Professor Angell; that is, of having commercial banks pledge sufficient assets to acquire 100 per cent reserves. This expedient would establish a ceiling on the volume of bank assets and bank money and permit commercial banks to lend and invest within the limits established. Professor Fisher has endorsed this general idea, recommending that the government rate its bonds held by banks at par and that it lend on such bonds enough additional cash to bring reserves to the 100 per cent level. Banks would not be allowed to increase their reserve in bonds and would thereafter be limited to the revolving fund established, except insofar as the monetary authorities elected to alter the amount of cash reserves. Professor Fisher has endorsed the Voorhis bill which proposed changes along the general lines indicated. Finally, there have been various other

proposals for increasing reserves or establishing ceilings on some compromise basis.

Section 9,a was designed to test views as to (1) early proposals, (2) the present version of the Fisher plan, and (3) other variants. The responses for (1) were 9 Yes and 30 No, for (2) were 3 Yes and 30 No, and for (3) were 14 Yes and 26 No. The results are not additive but suggest that 26 to 30 were opposed to any form of the plan. The responses to 9,c varied from 14 to 25 persons, suggesting a range for those in favor of some form of the plan. Unfortunately, several responses indicated unfamiliarity with (2); also, (3) was not consistently interpreted to include compromise proposals.

Section 9,b was designed to determine whether opponents of 100 per cent plans might give support under certain conditions, depending on developments at home and abroad. The number of affirmative answers was insignificant, except in the case of "serious inflation" (4), which received 7 affirmative answers.

Section 9,c suggested some of the major arguments which have been advanced by proponents of 100 per cent plans. The largest numbers of affirmative votes were given to control over the quantity of money (5), management of the public debt (1), price level stabilization (6), and the prevention of bank failures (4), in the order indicated. The prevention of booms and depressions (7) received a majority negative vote and only a small number of persons signified approval of nationalization (8), high interest rates (9), or bank earnings (3) as significant arguments. Several persons stressed the overlapping character of the arguments, some noting that the quantity of money argument covers everything, and others observing that the public debt issue is the dominant consideration.

Inspection of the results and comments seems to warrant the conclusion that section 9 has not shown the varying shades of opinion in clear-cut fashion. The brevity of the questions gave rise at some points to different interpretations. Some of the responses indicated lack of familiarity with the major plans and issues. If further attempts are made to determine sentiment on the 100 per cent idea it would seem necessary either to limit the questionnaire to one clear-cut proposal, as Professor Fisher has endeavored to do, or, if another attempt be made to measure shades of opinion, to spell out the issues in greater detail. It is questionable whether an attempt to take account of changing circumstances or to measure the weights which proponents give to various arguments can yield very significant results.

100. Branch banking. Economists approve a liberalization of branch banking—regional, national, and state-wide—and in that order. Only one respondent voted to abolish branch banking.

11. Inflation.

a. The question on inflation might have gotten more clean-cut results had we asked respondents to check one choice instead of answering all three. However, it is easy to interpret the results. Nearly everybody considers a substantial rise of prices both probable and possible. Only 10 answered the third part, 6 indicating that such rise in prices is unlikely, and 4 not unlikely. One voted unlikely "if OPA is retained another twenty-four months." Only 29 voted on this part of the question.

b. Most respondents answered this part of the question: Inflation, if it comes, will be caused by relative scarcity of goods and, secondarily, loss of confidence in the dollar. A third cause was inserted by a large number of respondents; namely, increased costs of production. Pressure groups, strikes, unwise government controls, full employment policy are specifically mentioned. Many stated that a combination of (1) and (2) or all three factors will bring about inflation, and some said that it is already evident in land and equity prices.

THE INTERNATIONAL MONETARY QUESTIONNAIRE

The international questionnaire was sent to 94 qualified economists. Less than half of this number were returned and only 34 were received in time to be included in the analysis tabulated below. As in the case of the domestic questionnaire, the number of Yes and No answers were totaled and the percentage of Yes to total answers computed (those falling within the ranges of 75 per cent and above and 25 per cent and below represent agreements and are bold-faced, the number of qualifications, total and according to Yes and No answers, being indicated in the Comment column.

International Monetary Questionnaire

Questions have been grouped under subject-matter titles. Indicate whether you approve (column 1) or disapprove (column 2) the proposals. If you do not know, do not want to express your opinion, or wish to qualify your answer, check or otherwise indicate in column 3.

	% Yes	1	2	3
		Ap-proved	Disa-proved	Comment Total: Yes/No
I. *Methods of determining postwar exchange rates*				
1. Assuming that the bulk of commodity and capital transactions in foreign trade will be carried on by individuals operating within the framework of a moderate degree of government control, do you approve or disapprove				
a. fixed exchange rates	35	7	13	5:2/2
b. freely fluctuating exchange rates	**17**	3	15	3:2/0
c. occasional revaluation of fixed rates by unilateral action	**11**	2	15	7:2/2
d. revaluation of fixed rates by agreement; e.g., through the Monetary Fund	**94**	30	2	4:3/1
(1) Do you approve of the position taken by Haberler or by Hansen in their recent symposium on fundamental disequilibrium (see *Rev. of Econ. Stat.*, Nov., 1944, pp. 182–183 and 191–192) (circle name)	60	Hab. 12	Han. 8	8:4/3

	% Yes	1 Ap-proved	2 Disap-proved	3 Comment Total: Yes/No
2. New postwar monetary parities should be determined on a basis of				
a. purchasing power parities (using 1939 as base year)	39	7	11	6:3/1
b. cost parities (using 1939 as base year)	37	7	12	6:5/0
c. some other quantitative formula	29	4	10	10:3/1
d. the method of trial and error involving consecutive parity adjustments	**84**	21	4	5:5/0
e. would your answers be different				
(1) assuming full employment in different countries	45	8	10	3:2/1
(2) less than full employment (Yes in column 1, No in column 2)	48	10	11	5:4/1
3. In fixing a new rate at the time of revaluation, should the new rate be established by relating the country's national currency to				
a. gold	70	14	6	8:6/0
b. the dollar	50	6	6	9:4/1
c. a "key" currency for the country in question	33	5	10	8:3/2
d. a group of other currencies through agreed action by all countries concerned	70	19	8	13:10/1

II. *Exchange controls in relation to domestic business*

	1 Current Account						2 Capital Account					
	% Yes	A		% Yes	B		% Yes	A		% Yes	B	
		Yes	No		Yes	No		Yes	No		Yes	No
1. Domestic full employment policies, through expansionary fiscal policy not matched by similar policies abroad, are compatible on current and on capital account with absence of restrictions (control of international transactions) (A) in periods of moderate stability, (B) in a period like the thirties												
a. in industrial countries not heavily dependent upon foreign trade	**86**	18	3	**68**	15	7	**75**	15	5	**35**	7	13
b. in industrial countries heavily dependent upon foreign trade	60	12	8	**19**	4	17	**50**	9	9	**11**	2	17
c. in raw material countries	57	12	9	**14**	3	19	**33**	6	12	**10**	2	18

Comments on the Above Answers
(Total: Yes/No)

	1		2	
	A	B	A	B
1, a	6:3/1	4:2/2	4:1/1	5:1/3
b	3:1/1	3:1/1	3:1/1	3:1/1
c	4:1/1	3:1/2	3:1/1	3:1/1

	1			2			Comment	
	% Yes	Can		% Yes	Will			
		Yes	No		Yes	No	1	2
2. World-wide full employment policies, i.e., co-ordination of national policies, (A) *can*, or (B) probably *will* achieve sufficient economic stability in the long run to permit balance of payment adjustments without import controls, exchange controls, foreign trade monopolies								
a. if Russia continues to deal with other nations exclusively through state monopolies	**96**	21	1	**79**	11	13	12:9/1	9:5/1
b. if a large sterling bloc continues to pursue monopolistic trade practices, partly through bilateral payments agreements, partly through government supervised cartels	48	10	11	**7**	1	13	7:5/1	5:1/2
c. if every other country has state monopolies or equivalent trade and exchange controls	**21**	4	15	**6**	1	15	8:3/3	7:1/3
d. if the United Nations Organization provides the necessary security for a free flow of international trade	**95**	21	1	**82**	14	3	8:6/1	8:4/2

	% Yes	1 Approved	2 Disapproved	3 Comment Total: Yes/No
III. *The extent to which a nation can permit freedom of international payments*				
1. International payment should be entirely free	55	11	9	9:5/1
2. All payments should be controlled	**0**	0	18	4:0/2
3. Only payments arising out of capital movement should be controlled	65	11	6	12:5/1
4. All payments should be controlled, but with a general license extended to those which are connected with commercial transactions	29	4	10	8:2/1
5. Countries that have accumulated dollars and gold reserves during the war (e.g., Latin America) should now be permitted to spend them freely (except for domestic rationing, etc.) in the United States	**83**	20	4	9:4/3
6. In the event of a depression in the United States dollars should be rationed by the Monetary Fund as a means of protecting other countries from the effects of such a depression	48	10	11	10:1/3
7. United States exports to foreign countries should be rationed (through the retention of wartime export controls or otherwise) in the event of, and as a means of combating, inflation in the United States (waive considerations of domestic rationing)	37	10	17	9:3/5
8. United States should co-operate with foreign countries to curb unproductive capital transfers through the exchange of information on private balances	77	20	6	4:0/1
IV. *The impending scarcity or shortage of foreign, especially dollar, exchange should be relieved by*				
1. blocking sterling balances	33	7	14	10:6/2
2. loans by U. S. government				
a. at market rate of interest on U. S. securities of same maturity	61	11	7	10:5/2
b. at lower rate; e.g., 1%	69	11	5	7:3/2
c. without interest	53	8	7	10:6/2
3. private loans				
a. with U. S. quarantee	43	6	8	7:4/0
b. with support of Bank of Reconstruction and Development	**81**	2	5	6:4/0
c. unaided	69	11	5	7:5/0
4. direct private investment abroad	**89**	23	3	4:3/0
5. allowing other currencies, especially the pound, to depreciate relative to the dollar	60	15	10	11:7/3
6. "rationing" of the dollar by foreign countries	35	8	14	11:5/2
7. other exchange control measures by Britain	**25**	4	12	8:4/1
8. organization of regional currency groups	**9**	2	21	4:2/1
9. use of national or group stabilization funds				
a. if International Monetary Fund is not created	**79**	15	4	8:3/0
b. as a supplement to an International Monetary Fund if one is created	53	8	7	8:2/0
10. substantial reduction of U. S. tariffs				
a. by agreement along lines of reciprocal trade agreements	**100**	28	0	5:3/0
b. by unilateral action if agreements fail	**83**	19	4	5:2/1
V. *The British external debt and balance of payments problem*				
1. Do you favor (approve) financial aid to Britain				
a. without conditions	26	6	17	5:2/2
b. on condition that Britain remove wartime trade and exchange controls	**76**	16	5	9:7/1
c. on condition that such controls plus imperial preferences be removed, even if U. S. tariffs are reduced	68	15	7	10:6/3
d. only in the form of taking over a part of Britain's Sterling area debt, so as to unfreeze the blocked sterling balances	**6**	1	16	4:1/3
VI. *Foreign loans and investments*				
1. Before they approach the U. S. government for loans, European countries should be made to finance their imports from the U. S.				
a. out of any gold and dollar reserves they possess	**10**	2	19	5:1/2
b. out of any excess gold and dollar reserves beyond their own minimum reserve requirements	46	11	13	7:4/1
c. out of excess gold and dollars beyond reserve needs as long as sufficient to meet relief and reconstruction requirements	71	17	7	9:2/3
2. A reasonably large outflow of capital from the U. S. is *desirable* because				
a. by increasing productivity and incomes abroad, it will increase directly or indirectly foreign purchasing power for U. S. goods	**88**	23	2	10:6/0
b. it will contribute to maintenance of prosperity and high level of employment in the U. S.	**88**	23	2	9:7/0
c. without it, high level of employment in U. S. will be extremely difficult	48	11	12	7:5/1

	% Yes	1 Approved	2 Disapproved	3 Comment Total: Yes/No
d. it will contribute to world political stability and security	**97**	29	1	8:8/0
e. despite individual losses, prospects are good that they will prove sound from point of view of profit and loss in the aggregate	67	12	6	9:4/1
f. even if justification is doubtful on basis of dollar profit and loss, it is justified from the standpoint of benefits to the U. S. as a whole	**82**	22	5	8:5/1
g. without it, foreign countries will have difficulty in developing their trade and payments on a liberal multilateral basis and will establish currency areas and economic blocs	**93**	28	2	6:4/0
3. Such capital exports are *undesirable* because				
a. unsatisfactory record of many foreign borrowers and unreliability of undeveloped countries making unlikely substantial repayments of large-scale loans	**5**	1	18	7:0/4
b. defaults, for whatever reason, engender ill-will and create difficulties offsetting immediate gain	**13**	2	13	8:0/5
c. in effect, it is a plan to export unemployment which will invite retaliation	**6**	1	15	10:0/6
d. interest and amortization payments will ultimately tend to depress domestic industry, offsetting prosperity stimulated in the beginning	**0**	0	16	8:0/4
e. it will interfere with development in the U. S. especially of backward areas	**0**	0	19	6:0/4
4. With respect to the role of government in regard to capital exports, do you believe that				
a. during the next few years without governmental measures a reasonably large outflow of private capital will be exported in the interest of U. S. economy	29	8	20	7:1/2
b. the government should supplement private investment if necessary to insure "adequate" amounts	**93**	25	2	7:3/0
c. government program of capital export should be designed to mitigate fluctuations in private capital export by adjusting the amount of total capital export, including government lending, to the state of domestic and international economic conditions	64	18	10	3:0/1
d. if a government lending program is approved, interest rate policies should be				
(1) uniform rates for all borrowers of similar maturities and other conditions (assuming that although risks vary, no loans are made unless good)	40	8	12	7:0/3
(2) rates that do not compete with private lending, provided private money is available on terms generally regarded as not unreasonable	73	16	6	8:4/2
e. that money borrowed here must be spent in the U. S.	**6**	2	29	3:0/2
f. the government should prevent private loans of an undesirable character and contrary to the best interests of the U. S.				
(1) by requiring registration and giving government power to deny application	56	10	8	3:1/0
(2) limit government control to disclosure of relevant facts	70	21	9	2:1/0

Analysis of Results—Question by Question

The following interpretations of the results of the poll were made by participants who contributed to the drafting of the questions and who had the benefit of the comments written in by respondents.

Question I. Methods of determining postwar exchange rates.

The questions in this section were discussed by Dr. Ragnar Nurkse and Professor M. E. Garnsey.

Dr. Nurkse comments as follows:

The nature of the questions in this section does not permit a precise analysis of the answers with respect to their logical consistency. But even without any such elaborate analysis it seems to me that the answers yield certain definite results which are in general quite consistent with each other. In summarizing them, I will distinguish between positive results and negative results.

In the first place there is an overwhelming majority in favor of a system in which fixed exchange rates are, in case of need, revalued by mutual agreement through some such machinery as the Bretton Woods Fund. That is clear from the answers to question 1,d: the majority

is 30 to 2. Incidentally, this was the question which got the greatest number of answers in this section of the questionnaire.

Thus nearly everybody wants exchange rates to be adjusted by mutual agreement. This is a welcome result. An exchange rate by its very nature is something that concerns more currencies than one. It used to be thought that the gold value of a country's currency was of no concern to anybody except that particular country. But, of course, the gold values of currencies determine their exchange rates, and exchange rates are inherently a matter of international concern and a matter for international agreement. Here, then, is one lesson of the past which has been taken to heart.

Now the question arises, what is the criterion on the basis of which agreed adjustments in exchange rates are to be made? This is the supplementary question under 1,d: the choice between the conflicting views expressed by Haberler and Hansen. There is a definite, though not very large, majority in favor of Haberler; that is, in favor of the balance-of-payments criterion as against the concept of purchasing power or cost-structure parity.

The answers to question 2,d show a very large majority (21 to 4) in favor of determining postwar exchange rates by the method of trial and error involving consecutive parity adjustments. Unfortunately the balance of payments is not mentioned among the criteria listed under question 2, and so the members who voted for Haberler under question 1,d,(1) do not get a chance to show their preference here. I take it that most of the respondents who favor the process of trial and error would favor using the balance of payments as a guide for this purpose. This does not mean that price and cost comparisons cannot also be used as a guide. In fact Haberler himself stresses the importance of price and cost comparisons as a statistical indication for the fixing of the initial rates in the present postwar situation, because during the war period many countries simply have not had a balance of payments in any normal or economically significant sense.

The third point at which we find both a large number of answers and a large majority of positive answers is question 3,d. The meaning of this question is not very clear, but from some of the comments it seems that members took it to mean the Bretton Woods Fund arrangement and that is the way I would interpret this question myself. Of course, those who answer question 3,d in the affirmative would not necessarily answer questions 3, a and b in the negative. In fact the Fund arrangement requires that the par value of each member's currency shall be expressed either in gold or in United States dollars. Practically these two alternatives mean the same thing under present conditions.

It seems, then, that we know approximately what we want. We also seem to know what we do not want. First, under 1,a there is a large majority against the principle of fixed exchanges, by which I suppose is meant permanently fixed exchanges. This large majority becomes an overwhelming majority if we take the comments into account, because three of the affirmative respondents approve of fixed exchanges only subject to c or d; that is, subject to occasional changes either unilaterally or by agreement.

Secondly, it is quite clear that we do not want freely fluctuating exchanges either. The majority here is 15 to 3, and even among the minority of 3 there are 2 answers which are subject to qualifications.

In the third place, the answers to questions 2,a and b show that most people are not inclined to rely simply on price and cost comparisons in the determination of postwar parities. I may perhaps return to this problem in a moment.

Lastly, it may be worth pointing out that there is a 2 to 1 majority against the fixing of exchange rates in terms of "key" currencies. The question under 3,c does not necessarily relate to the "key" currency approach as a whole; yet it does seem to me that here the "key" currency school has suffered a defeat though only 15 members answered it. Incidentally, there was even less interest in question 3,b, which was answered only by 12 members, with the answers evenly divided. Evidently American economists do not feel any strong interest in getting other countries to tie their currencies formally to the American dollar.

So much for the answers. Now I may perhaps be allowed to say a few words on the questions. On the whole, I am rather more pleased with the answers than with the questions. As I had a hand myself in drafting the questionnaire, my remarks on this point are really in the nature of self-criticism. The questionnaire was drawn up largely by correspondence; and it may be that correspondence with a number of people scattered in many parts of the country is not the ideal way to compile a questionnaire of this sort. But I feel quite sure that Professor Bell, the Chairman of our Committee, has done the very best that could be done in the circumstances.

I feel that the questions might have been formulated so as to bring out the basic issues more clearly. It would have been interesting, for instance, to find out more definitely what economists think about the merits of the balance of payments criterion as compared with the price and cost criterion. Perhaps we could have got a larger number of answers to this question if we had actually quoted the opposing definitions instead of merely referring to the two articles by Haberler and Hansen, which some members may not have read. Apart from their comparative theoretical merits, these conflicting definitions have a direct bearing on international monetary

policy. Surely what the Bretton Woods Fund is interested in is, I submit, equilibrium in the balance of payments, simply because a lack of equilibrium in the balance of payments is likely to involve a draft on the Fund's resources. Surely from the Fund's point of view, therefore, the equilibrium rate of exchange can only be the rate which a country can maintain without persistently drawing on the Fund's resources.

One might object that this point of view is a narrow one which should not be decisive. But the balance of payments criterion is also justifiable on broader grounds. Equilibrium in the balance of payments is a necessary and desirable criterion because it rules on those "beggar-my-neighbor" policies by which an individual country may stimulate its national income and employment situation through a surplus in the foreign balance. Surely it is desirable to rule out such policies. It is true in a sense that the balance of payments is only a symptom of more fundamental factors. But these more fundamental factors are various and numerous, and the cost-price structure is only one of them. In addition there is in particular the volume of national income and effective demand, which may shift, especially in conditions of underemployment, without appreciable changes in costs and prices.

This is the kind of issue on which I personally would have liked to find out more clearly what economists think. But, on the whole, there is little reason to complain about the questionnaire as it stands. At least the first section of the questionnaire has yielded some clear and significant indications, both positive and negative, concerning the attitude of American economists toward the problem of international exchange rates.

Professor Garnsey reported his reactions as follows:

The first point which strikes the observer is that of the 16 different questions (as subdivisions of the three main questions) only 3 were answered by a substantial majority of the 34 respondents; namely, 1,d, 2,d, and 3,d. Nearly all respondents replied to question 1,d (32 out of the 34) and 30 of these approved. In question 3,d, 19 approved, 18 disapproved (27 answers out of 34 replies). It is interesting to note that these two questions, upon which a large majority of the respondents felt competent to express judgment, are directly related to the proposition that general over-all agreement among the countries of the world is desirable. One might be forgiven for assuming that the above replies are a reflection of the current preoccupation with the need for international agreement. In this connection it is interesting to observe that these answers are consistent with those which appeared in the first monetary questionnaire circulated a year ago. At that time 66 respondents approved the general purposes of the Bretton Woods Agreements and only one disapproved. Also, in the poll of the Economists' Committee on Bretton Woods, 90 per cent of a much larger number of economists expressed approval of Bretton Woods.

In question 2,d, 21 approved and 4 disapproved (25 answers out of 34 replies). This answer probably reflects in part a reaction against the complex or controversial nature of the other questions. In addition, the approval of trial and error also may have been based on an assumption that the question referred to the short-run period immediately following the war and prior to the implementation of the Fund. Nevertheless, the fact that 21 respondents approved trial and error while no more than 7 approved a quantitative approach to the determination of parities surely has some additional significance. Does it mean, for example, that these economists are content to "muddle through" rather than to attempt at least a partial application of scientific method to an economic problem of vital importance?

Of the 35 respondents, only 18 to 20 were willing to express an opinion either way on the other 14 questions. The three questions which received the lowest number of replies were 2,c, 3,b, and 3,c. Three probable explanations for the small number of answers might be advanced: The respondent was in doubt because of the controversial nature of the question; the respondent was in doubt because of the technical complexity of the question; or, finally, the respondent was in doubt because of the ambiguity of the question. One characteristic of the return indicates that the second reason may have been the most important; for while the three questions answered by a large number of respondents showed a high degree of unanimity in the answers, the other questions, on the whole, showed a more even division of opinion.

Differences in opinion revealed in Yes-No answers tended to disappear when qualifications were taken into consideration. An important conclusion might be drawn from this: In questions suggesting alternative ways of dealing with a problem, it is difficult to frame statements which are mutually exclusive in character so that the statement itself invites qualification. In any case, it is perhaps not at all surprising that the expert can rarely bring himself to express unqualified approval or disapproval of a given statement no matter how precisely it may be phrased. Consequently, the direct Yes or No answer must be supported by qualitative reservations and explanations, and the proper evaluation of the comments is essential to the accurate interpretation of the results of the poll.

Question II. Exchange controls in relation to domestic business.

Question III. The extent to which a nation can permit freedom of international payments.

These two questions were discussed together by Mr. de Vegh:

A summary of the questions. The first group of questions (II,1) concerns the compatibility of domestic full employment policies with free exchanges under world-wide cyclical fluctuations.

The second group (II,2) deals with the compatibility of domestic full employment policies with free exchanges under world-wide full employment policies but under variant institutional setups.

The third group of questions (III) deals normatively with the problem of free exchanges: what should foreign exchange policy be under various assumptions?

This is a systematic and comprehensive group of questions. Comments received with the answers indicated that some of those polled found the wording ambiguous in spots; others thought that the basic assumptions were not focused clearly enough. These comments are not unreasonable. Yet most of the major foreign exchange problems and policies of the postwar era found their way into the questionnaire and did it in a systematic way, permitting a coherent system of answers from anybody who was willing to give the questionnaire careful consideration.

Results. Of the 34 questions analyzed, not more than 27 answers were received for any one question; the minimum number of answers was 14.

The answers to the first group of questions (II,1) are generally true to form, although the minority opinions are quite interesting. There was a minority, although very small, which thought that domestic full employment policies, through expansionary fiscal policy not matched by similar policies abroad, were compatible with an absence of exchange restrictions in a period like the thirties, even in industrial countries heavily dependent on foreign trade and in raw material countries.

Conversely, there was a sizable minority (5 out of 20) that considered the freedom of capital movements incompatible with unilateral full employment policies even in good times and in industrial countries not heavily dependent on foreign trade. Fully two-thirds thought that control of capital movements was necessary in any country for unilateral full employment policies in times of world-wide depression.

The United States being the only industrial country not heavily dependent on foreign trade, these answers mean that even with respect to the United States a 2 to 1 majority does not believe that we can spend our way out of a world depression and have free exchanges at the same time. As to the rest of the world, expectations were proportionately—or perhaps less than proportionately—more pessimistic.

The second group of questions (II, 2) apparently contained some pitfalls. Having stipulated world-wide full employment policies, the vote was 15 against 4 that if the rest of the world has exchange control we have to have it too and the vote was 15 against 1 that we were going to have exchange control under such conditions. This is so flagrantly more pessimistic than the answer to the identical question under conditions of unilateral full employment policies in II,1 as to make one wonder whether the participants have co-ordinated their answers at all. It does seem either that there is no faith in the possibility of successful world-wide full employment policies or that full employment policies always cause such distortions as to necessitate exchange control.

Perhaps the most interesting answer in this group of questions is that to the last one (II, 2,d); namely, the possibility of free exchanges *if* the UNO provides the necessary security. Note that the question was not *whether* the UNO will do so, but merely what happens if it does. The virtual unanimity—flagrantly contradicting previous results—that exchanges can and will be free under world-wide full employment policies if the UNO does keep us safe, suggests that maybe considerations of national security were at the backs of the respondents' minds more than the feasibility of co-ordinated world-wide full employment policies. It suggests that somehow the political aspects are the decisive ones and the purely economic ones secondary.

By the way, I wondered a good deal about the correct interpretation of this question. If the UNO does not provide the necessary security, the armament race of the great powers will presumably provide a sort of co-ordinated world-wide full employment program, possibly not of the sort that we would like to see, but a frighteningly effective one just the same. I suppose that that kind of "full employment" would necessitate permanent exchange control.

The third group of questions (III), namely, what foreign exchange policy ought to be, gives a 55–45 division in favor of free exchanges. This of course contradicts the vote on the limits of the possible. It is almost as if we had risen and said that we want free exchanges because we cannot always have them.

To me the most startling votes in this section were those connected with capital movements. Sixty-five per cent voted permissively in favor of control of capital movements and 77 per cent voted that the United States should co-operate with foreign countries to curb unproductive capital transfers through the exchange of information on private balances. If this means what it says, it means that 77 per cent of those voting do not ever want to see a political

refugee again, or, at any rate, will only stand for destitute ones. A flight of capital is the final protest of a defeated minority before it seeks physical exile. I doubt if it was the intent of the 77 per cent majority that the United States Treasury should have turned over to the Nazi Government a list of German assets in the United States, including, of course, the assets of prospective refugees, but if it was not, their vote makes no sense.

There is a curious contradiction between the answers to questions 5 and 7: On question 5 the vote was 20 against 4 that foreign balances should be freely expendable here now, but on question 7, 10 voted that we should ration exports to combat inflation. It may be that those answering did not think we were having inflation today, in which case, however, question 7 becomes meaningless.

To generalize, the acceptance of trade and exchange controls of varying stringency by most respondents, and the universal pessimism regarding a reversal to free exchanges are the most interesting material conclusions of the poll. The many contradictions suggest, however, that at least some of the respondents may not have taken the necessary time to work out a coherent system of answers to so long a questionnaire. To what an extent a greater stringency of definitions and more precise wording of the questions would have helped remains, of course, an open question.

Question IV. Impending scarcity of dollar exchange.

The interpretation of these questions dealing with the impending scarcity of the dollar was presented by Dr. J. H. Furth, in collaboration with Professor C. R. Whittlesey, who had a good deal to do with the drafting of the questions in this section:

Interpretation of results. The group of economists that answered the questionnaire believes in "classical" liberalism in the field of international finance, and is particularly opposed to any form of planning that might result in regional discrimination. Some members, however, have failed to consider all implications of the questions and their answers.

Measures intended to relieve the dollar shortage should obviously be different according to whether the shortage is assumed to be merely the result of the extraordinary exigencies of the immediate postwar period or that of a structural maladjustment of the world economy. In the first case, the shortage may be expected to last only for a few years, while in the second case the shortage would be permanent unless the necessary changes in the structure of the world economy were made. In the first case, foreign loans and investments would be appropriate and sufficient, but in the second case, such loans—desirable as they may be for other reasons—would serve at best to postpone a crisis, and their service charges would make the shortage even more acute than it would be without them.

The great majority of the answers endorses both foreign loans and efforts to change the structure of the world economy by reducing United States tariffs. This is not necessarily a contradiction: it may be argued that the shortage in itself would be only temporary and should be relieved by loans, but that the repayment of the loans would create another shortage which should be relieved by a reduction in tariffs. Moreover, loans can be negotiated much sooner than a tariff act could possibly be passed by Congress. It is doubtful, however, whether this actually was the reasoning behind the answers. If the permanent dollar shortage is believed to result mainly from the service of the loans, it would be reasonable to give these loans free of interest, but only a bare majority of all answers favored such a course. On the other hand, if United States imports have to be raised more than exports, the best way to achieve that purpose would be a unilateral reduction of tariffs, but a sizable minority opposed such a course.

The measures that found most favor with the group were a reduction in tariffs by reciprocal agreement and direct private investments. It is questionable whether these measures are suited for the one purpose in question. Reciprocal trade agreements tend to increase exports and imports in about the same proportion, and therefore do not alleviate a dollar shortage. Private investments are usually made in the expectation of high yields, and create a larger demand for dollars in the near future than any other method. It may be suspected, therefore, that the results were close because these methods appealed to the economic mind in general, although for reasons little connected with the problem at hand. Similarly, the largest number of votes cast on the question of government loans favored an interest rate of about 1 per cent rather than the market rate and rather than no interest at all. If, however, American taxpayers should be protected, the market rate for United States securities would be appropriate, and on the other hand, if payments to the United States should be minimized, no interest would be preferable. The compromise has little advantage except for the emotional appeal of a compromise in general. It cannot be defended as giving due consideration to the conditions of the debtor since for the debtor the problem whether to pay 1 or 2¾ per cent is of minor importance as compared to the maturity of the loan and to safeguards in the case of an adverse balance of

current payments. Actually, a 27-year loan at 2½ per cent implies slightly smaller annuity payments than a 22-year loan at 1 per cent or a 19-year loan without any interest at all.

Proposals for questionnaire. It might be interesting to note whether questions 2 and 3 (foreign loans) were answered positively by the same or by different persons; i.e., whether everybody agreed with the necessity of loans and differed only as to the question of public and private loans and to the amount of interest, or whether a minority opposed any loan at all.

It might also be interesting to find out whether some economists would favor a policy of (automatic or planned) changes in the relative price levels as a means to relieve the shortage of dollar exchange. An increase in the United States price level might make unnecessary any other structural change, and might easier be achieved than a reduction in tariffs.

Supplementary remarks. I wonder whether the answers would have been particularly different if the same questions had been asked without reference to the stipulated conditions of an impending shortage of foreign exchange. Does the questionnaire reflect anything more than (a) general approval of tariff reduction and of such conventional methods of international finance as private lending and the operations of exchange stabilization funds, and (b) general disapproval of the less orthodox forms of exchange control?

The only response that looks as though it might differ appreciably from what would have been recorded in a general vote on the questions is the fairly strong support given to the idea of allowing the pound and other currencies to depreciate relative to the dollar. There is no necessary reason why economists should not adopt the same attitude toward these policies in general and in the particular circumstances indicated. Nevertheless it seems probable that a similar poll of economists in England would have shown distinctly different results, not so much because of disagreement on fundamental principles, as because of a different evaluation of the difficulties of Great Britain and other countries abroad.

If this tentative observation leads to any useful conclusion it is that an attempt might be made in such instances to focus attention on both the general and the special case. This would probably require the submission of two sets of questions.

Question V. The British external debt and balance of payments problem. Professor S. E. Harris' observations on these questions were as follows:

The results of the questionnaire are of limited significance since replies were had from only 23 respondents. In general, financial aid to Britain was approvéd: without conditions, however, in only 26 per cent; on condition that Britain remove wartime trade and exchange controls, 76 per cent; on condition that such controls plus imperial preferences be removed, even if United States tariffs are reduced, 68 per cent; on the assumption only that this country take over a part of Britain's sterling debt, so as to unfreeze the blocked sterling balances, 6 per cent.

Since the questionnaire has been systematically explored by other speakers on this program, I shall limit my remarks to the significance of the questions put and to the actual agreements worked out with the British in comparison with the proposals of the economists as revealed in this questionnaire.

On the questionnaire proper, I shall limit my remarks to the meaning of financial aid. Who will say that the British actually received financial aid? They are asked to pay back over a period of fifty years a loan (if the line of credit is fully used) of 3.75 billion dollars at a rate of interest of 2 per cent. Actually, when allowance is made for the nonpayment of interest the first five years and the time of receipt of the cash, the rate is around 1.7 per cent.

The first question that arises is, does the British Government pay this government more than the cost of the money advanced? Undoubtedly, the answer is no. What is relevant is not the average rate paid by this government, namely, 1.9 per cent, but rather the marginal rate, which is a higher rate. Furthermore, the British borrow for a long time; and the relevant rate for (say) a 25–30-year loan, which may be roughly considered the average period of the loan, is significantly more than 1.9 per cent. What is more, in view of the risks involved—who is to say today that the British will be able to finance loan payments in the year 2000?—the rate may be considered all the more reasonable. (The rate of the Export-Import Bank is significantly higher.) Provisions for cancellation of interest payments when the British balance of payments become precarious, attests the transfer risk.

On the basis of the relation of interest cost and interest paid, we may conclude that financial aid has been given to the British. This conclusion is strengthened when consideration is paid to the outright cancellation of lend-lease, exclusive of compensation for property still held. Important aid has thus been given to the British.

Two reservations should be noted. First, this aid is required as a direct aftermath of the war. The British may well have expected this country to carry the British to some extent until their export position had been re-established. In the distribution of war tasks, the British had been required to concentrate on war tasks and give up export trade. Second, we should not leave out of account the favorable effects of the loan upon world income and trade, and hence upon the income of this country. One might easily establish the fact that even a non-

interest bearing loan, which does not seem palatable to the politicians, might well have yielded this country substantial net gains.

The British made important concessions in commercial policies—perhaps even more than might have been expected from the economists replying to the questionnaires. The British, for example, approved the proposals in the British document, "Proposals for Consideration by an International Conference on Trade and Employment." In this important State Department paper, it was agreed not to export unemployment, to preserve full employment policies, to treat all countries in each market on equal terms, to expand opportunities for foreign trade and economic development, to reduce tariffs under the most-favored-nation clause, to take measures to reduce quantitative restrictions and eliminate exchange control, and to deal with restrictions imposed to safeguard the balance of payments.

In addition, the following provisions were made:

1. The United Kingdom Government will not apply exchange controls in a manner so as to restrict payments or transfers in respect to products purchased from the United States, or on current transactions between the two countries. (This is subject to the Bretton Woods Agreement.)

2. With some exception, it was agreed that beyond one year after effective date of this agreement, the United Kingdom and the United States would not impose restrictions on payments and transfers for current transactions.

3. Again with some reservations, the participating countries agreed not to discriminate against imports from the other country when they have recourse to quotas.

4. Within one year, the British agree, each member of the sterling area would be allowed to use its dollars and sterling freely, and without discrimination in all markets.

In short, financial aid was given; but it is not yet clear how much. And important commercial concessions were made by the British. The exact degree of the concessions will depend upon the success with which the world under Anglo-American leadership carries out the program announced by the State Department.

Question VI. Foreign loans and investments.

Dr. J. P. Young's interpretation of the results on this section is as follows:

Although only 34 replies were received in time for tabulation, the results are interesting. On the basis of the replies received it may be said that economists believe that a reasonably large outflow of capital from the United States is desirable for broad economic and political reasons. About 90 per cent of the replies support this view.

The economists who replied are overwhelmingly of the opinion that outflow of capital will aid the expansion of world trade and production, and that it will contribute to the maintenance of prosperity and a high level of employment in the United States. The questionnaire did not distinguish between long-run and short-run effects on employment. While there is an immediate stimulation to employment from capital exports, as interest and amortization payments increase they tend to reduce the stimulus resulting from a given annual amount of capital export. The gross capital export would after a few years need to increase rather sharply in order to maintain the same net stimulus.

The economists voted 93 per cent in favor of the statement that without substantial capital exports from the United States foreign countries will have difficulty in developing their trade and payments on a liberal multilateral basis and will establish currency areas and economic blocs. This implies approval of the proposed Anglo-American Financial Agreement.

The economists recognize the risks and possible undesirable features connected with capital exports but believe that these features are outweighed by the gains. Only a very few economists believe that these considerations should be a controlling factor.

On the subject of a revival of private investment, the respondents do not expect a large outflow of private capital in the absence of governmental assistance. Ninety-three per cent approve the statement that the government should supplement private investment if necessary to insure "adequate" amounts of capital export.

On the question as to whether a government program of capital export should be designed to mitigate fluctuations in private capital exports by adjusting the amount of total export, including government lending, to the state of domestic and international economic conditions, 64 per cent voted affirmatively. The wording of this question probably caused some confusion regarding implied support of an attempt to control the business cycle through government foreign lending. Few persons probably would dissent from the proposition that a government lending program should be adjusted to the volume of private investment and to domestic and international economic conditions. Several of the questions were not worded as precisely as they might have been as indicated by various comments.

The questionnaire as a whole indicates that economists to a very large degree approve of existing government policies with respect to foreign investments.

POSTWAR TAX POLICY

PERSONAL VERSUS CORPORATE INCOME TAXES

By HAROLD M. GROVES
University of Wisconsin

I. *Rationale of Business Taxes*

The rationale of a tax may seem to be of little consequence. Its incidence and economic effects may appear much more important. However, the effects of a tax depend somewhat upon the reasonableness of its imposition. Arbitrary taxes are likely to be injurious to morale.

Analysis of the rationale of a tax usually starts with a consideration of benefits and of ability to pay. As to benefits, it can be argued that business receives from government a desirable milieu in which to conduct its operations. Certainly, business could not thrive in the anarchy that would prevail without government; but neither could the wage earner, professional man, nor any other citizen. The fallacy lies in the fact that relative benefits are indeterminate. The benefit theory offers support for taxation in general, but it provides no satisfactory clew as to how taxes should be distributed. It is impossible to say in what degree various taxpayers benefit from a battleship.

In a sense, a business institution is an entity distinct from its owners. It can be conceived as an "organic unity," acting in a single capacity and receiving benefits from government in the course of this activity. However, it is as logical to identify this entity with its wage earners, creditors, and customers as with its owners. In this conception, everyone "belongs" to many such entities. But everyone bears some part of the business-tax load also, for the incidence (final burden) of business levies is probably not confined to the owners. The amount each person does and should bear, however, cannot be definitely determined.

The benefit theory has further limitations as a justification of the corporate net income tax. This tax takes no account of the fact that whether or not they show a net profit, corporations enjoy the favorable environment of government.

A personal tax considers the obligation of the taxpayer in the light of his duties as a citizen. A business tax approaches him in terms of "government as a factor of production." It is interesting that the factors of production—land, labor, capital, management, and government—are all, with the exception of the latter, employed voluntarily by the businessman. The amount of government and the apportionment of its cost to business are determined by voting. However, in the voting process, business (directly at least) has a minority voice.

In the last analysis, all taxes come out of the income or capital (actual

or potential) of individuals. Tax burdens cannot be borne by inanimate objects. Will division among individuals be more equitable or otherwise more desirable if business taxes are levied? This is the important question, and, in searching for the answer, one gets little guidance from a consideration of benefits.

Closely related to the benefit analysis is the contention that corporate taxes are justified as payment for the special privilege of operating as limited liability associations. Under modern corporation laws, however, the privilege is available for the asking. If competition were effective, the value of the privilege would be reduced to zero. It is true that competition is not that efficient, but corporate taxes make no pretense of measuring the results of monopolistic practices. Moreover, the states, not the federal government, grant most corporation franchises.

The second main support for the corporate income tax is that business entities have ability to pay independent of that of their stockholders. Difficulties here become apparent when the theory is given specific application. For example, if ability to pay is to serve as the basis of a corporate tax, can we properly ignore the ratio of earnings to capital invested? If the answer is negative, we are forced into the field of excess profits taxation, where the problem is one of due allowance for efficiency and risk.

Any corporate tax is necessarily impersonal in character and makes no differentiation among stockholders according to income status. The small stockholder, sometimes mainly dependent upon a small income from stocks, is subject to the same treatment as the wealthy investor.

It can be argued, of course, that the corporate income tax does represent a progressive element in the tax system because it is paid mainly by rich people. All studies of dividend distribution point to the conclusion that such income tends to much concentration in the higher brackets of income. This involves the question of incidence, which will be discussed presently. Assuming that the incidence of the corporate levy is on the stockholders, its progressive character is bound to be highly capricious. A truly progressive tax will not only assess a $25,000 income more than a $5,000 income, but it will assess *all* incomes of the higher level at a higher rate. The corporate tax results in a higher tax on dividends than on salaries, bond interest, or capital gains, regardless of quantitative aspects. The test of taxation which it applies is qualitative rather than quantitative. To contend that a tax is desirable merely because it is paid by the wealthy exemplifies the kind of irresponsibility which threatens the successful operation of a mixed economy.

It is true, of course, that certain other taxes, such as the levy on whiskey, are sometimes justified because they are paid mainly by the rich. The whiskey tax can be supported on the ground that the consump-

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tion of strong liquor should be discouraged. But as a means of making the rich support the government, its incidence is even more capricious than a levy on corporations. A recipient of a $100,000 income is hardly less able to pay taxes to the government than another of the same means merely because the former dislikes whiskey and the latter gives it a high rating in his budget.

The situation is complicated by the fact that many people believe there is something immoral about profits—especially corporate profits—which justifies singling them out for special taxation. This is associated with the idea that all business is more or less a racket. Unfortunately, there is more basis for this conviction than one would wish. But probably the salary paid the manager of a racketeering business is as immoral as the profits paid the stockholders. The fact that profit income is non-contractual and contingent hardly gives it a moral inferiority. Although there are many rackets connected with business, other fields, including even religion, are not immune.

There is also a conviction, and a much more legitimate one, that unearned income (from property) should pay more taxes than earned income (from services). However, a distinction on this score can be made most consistently at the personal level in a differentiation of the personal tax. As a matter of fact, even a differential tax on profits could be incorporated in the personal tax. Ignoring the problem of undistributed profits (for the present) it can be said that all property and income are attached sooner or later to individuals, and there are no sound objectives of taxation that cannot be achieved with a personal tax system. That it is possible to make the tax system more progressive, even with the elimination of the corporate tax as such, is not open to serious question. Available means to this end are a reduction of sales taxes, a strengthening of the death tax, and plugging the loopholes in the personal income tax.

II. *Incidence*

Thus far our discussion has been predicated on the assumption most favorable to the corporate tax; namely, that its incidence is on the stockholders. But there is strong ground for the belief that, especially over long periods of time, a considerable part of this tax burden is diffused among consumers, wage earners, and recipients of other investment income. For example, the British have levied few or no peacetime business taxes; yet it seems improbable that rates of profit in Great Britain are higher than here or higher than they would have been had the tax system featured business taxes. The old idea that an old tax is no tax is not entirely without application to the corporate income tax field.

It is true that corporate income taxes are based upon a surplus—in

one sense. The net tax is not a cost of doing business as a gross tax would be. On the other hand, profits are not all a *social* surplus in the sense that enterprise would be forthcoming without them. If some profit is necessary to draw out a supply of enterprise, it follows that any tax on the rewards of enterprise may affect the supply and that this may in turn affect output and prices.

Corporate taxes may also be diffused among investors. A special tax on one line of investment tends to check the flow of capital in that direction, resulting in higher rewards to investment there; the increased supply of funds in other fields reduces the rewards to those investments. Thus the levy might amount to an unearned income tax.

Two conclusions concerning the incidence of the corporate net income tax follow. One is that the factor of uncertainty regarding the ultimate burden of the tax is in itself a strong point against the tax. The second is that insofar as the tax is shifted forward it becomes a sales tax in disguise, having all the regressive features usually associated with the sales tax family.

It may be argued, of course, that the incidence of the personal tax is as uncertain as that of the corporate levy. However, this is not convincing. The personal tax is levied on the individual in his role as citizen and is a highly differentiated levy. It is extremely doubtful that this tax has any great effect on the supply of the factors of production.

III. *Economic Effects*

As to economic effects, it is apparent, first, that the corporate tax discriminates against corporations which finance with equity capital as compared with those that finance in part with bonded indebtedness. A dollar of income earmarked for the bondholder is paid to him in full, but a profit dollar earmarked for the stockholder is, in effect, cut to about sixty cents. The extent to which this affects the pattern of corporate financing is disputed, but the influence, whatever its degree, is clearly on the wrong side. Business instability is enhanced by excessive corporate debt.

The second approach to economic effects is through the factor of incentives. The author has argued that a tax close to the productive process and within the range of managerial discretion is likely to have more weight in decisions concerning business expansion than a more remote levy on stockholders. However, the main issue is not whether taxes at the corporate level are more of a deterrent than taxes at the personal level. The issue is whether singling out the profit element in income, regardless of distribution, for especially heavy taxation is a deterrent to risk-taking investment. The question, put this way, seems almost to answer itself.

Our present tax system applies two taxes to profits, one to bond interest, less than a full tax to capital gains, and none at all to the interest from many government bonds. Again it is important to point out that these are qualitative, not quantitative distinctions. If taxes are a deterrent to whatever they strike, as commonly supposed, it can hardly fail to follow that these perverse distinctions offer some discouragement to the assumption of risks.

The present combination of taxes also tends to encourage "corporate hoarding." The quantity of saving depends upon two conditions: the ability to save and the will to save. The corporate tax might diminish the ability to save, but the double tax feature attending it affords an extremely strong incentive to save. The present system provides a differential tax burden favorable to undistributed as contrasted with distributed earnings. Profits that pass through corporations are subject to two levies; earnings that are reinvested, to only one. It is a well-known fact that the increase in dividend distributions during the war was far less than the increase in corporate earnings. The cures for this perversity are not easy to apply. Obviously, the first to suggest itself is an undistributed profits tax in place of the corporate net income tax.

IV. *Social Control*

Turning next to the use of the corporate tax for social control, perhaps the strongest case built on this theme asserts that the corporate tax is a means of recapturing unjust enrichment arising from monopoly in business and that it is used, or might be used, to prevent monopoly. But is it good policy to tax all profits (or even all so-called "excess" profits) in the endeavor to tax monopoly profits? Monopoly profits can be taxed at the personal as well as the corporate level. If a corporate tax were to be designed for preventing monopoly, it would need to be graduated at the upper rather than at the lower level. A case could be made for such a tax, which, however, would be painfully undiscriminating.

It is true, of course, that a graduated corporate tax like our own gives a differential advantage to small business and that the social interest in small business is real and important. There are, however, other ways of using the tax system to aid small business. Since this subject is to be discussed by other speakers on the program, I shall not venture further with it here.

V. *Fiscal Necessity*

We come now to perhaps the strongest argument for the retention of a corporate business tax in the federal tax system. Certain practical limitations of personal income and death taxes, combined with high fiscal requirements, dictate the conclusion that not all the needed revenue can be had from sources approved without reservation.

The personal net income tax is subject to two limitations, the first of which is administrative. It has not been demonstrated as yet that we can apply a direct tax with high rates to large numbers of low-income farmers, professional men, and individual businessmen. The second limitation is political. It has not been demonstrated that we have the discipline to maintain the breadth of base and the high, effective rates necessary to make a direct tax supply all of our revenue needs. Strong pressure to raise exemptions is based on the theory that exemptions should be accommodated, not to revenue needs, but to some absolute standard of living. The proponents ignore the facts that governments supply prime necessities of life, too; that one way or another these will be paid for in part by families with incomes below the national average; and that the income tax is the fairest way to collect from such families. There is now and has always been a battle between opportunism and rationality in taxation, and a complete victory for rationality would be too much to expect.

Perhaps the various taxes should accordingly be rated in priority order. In such a scale, personal income and death taxes would rate at the top and general sales taxes at the bottom. Corporate net income taxes would rank well above most special excises. The latter are quite as arbitrary in their incidence as the corporate income tax and have the additional undesirable feature that they tend to undermine the highly important postwar market.

Another pertinent point is that several state and local taxes, including the general property tax, are subject to many of the objections here raised against the corporate income tax and to other limitations as well. An overhauling of these revenue sources is long overdue.

VI. *Undistributed Profits*

Time permits only a very limited discussion of the problem of undistributed profits. Obviously the type of personal tax system now used falls short of reaching ability to pay that does not pass beyond corporations. It is true that this ability does reach the individual income tax base eventually in the form of capital gains. Nevertheless, capital gains are not only favored directly by the tax system, but in addition many of them, for income tax purposes, are wiped out entirely when the taxpayer dies and the heir is allowed a basis for assets as of the time of inheritance. This loophole in the capital gains tax should be closed and capital gains should be taxed like other income (with parity treatment for capital losses).

It should be said, however, that the application of graduated rates to capital gains without allowance for the length of time during which they may have accrued would be harsh and unreasonable. Many critics of the income tax have long recommended the addition of an averaging feature

which would allow the taxpayer with casual or fluctuating income some relief from graduated rates. This would grant him the privilege of being taxed on his average income over a number of years rather than on his annual earnings. Because of the administrative difficulties involved, this innovation has never been very seriously considered by the tax makers. However, some progress in this direction, confined if necessary to the higher incomes or even to incomes dominated by capital gains or losses, seems not too ambitious an undertaking. For the small income recipient the benefit of averaging could take the form of a carry-over of unused personal exemptions. The important facts for our present discussion are these: averaging of some sort is a prerequisite to equitable taxation of capital gains, and equitable taxation of capital gains is a prerequisite to the integration of personal and corporate taxation.

However, the government cannot be expected to wait upon the realization of capital gains for the application of its tax system to corporate reinvestment. Some tax must be collected currently as income is earned and reinvestment occurs. There are several possibilities available for applying some equivalent of the personal levy to undistributed earnings. One of the most promising of the proposed devices, in my judgment, is to collect a corporate tax at one of the rates in the personal scale, and to use this tax as a withholding levy. On the undistributed portion of corporate income this would constitute an undistributed profits tax except that the stockholder would be credited with the tax paid on his behalf if and when the reinvestment were later distributed as corporate dividends.

It is true, of course, that this proposal—borrowed from the long-standing practice in Great Britain—would fall considerably short of perfectly integrating the corporate and personal tax. Whatever the withholding rate applied, too much would be collected from some small stockholders and (unless the top surtax rate were used) too little from large stockholders. The perfect device for achieving integration, waiving practical difficulties, would be the collection from stockholders upon their pro rata shares of undistributed profits. As applied to the general run of corporations, however, this has no successful precedent anywhere and it is open to serious practical difficulties so well known that it is not necessary here to describe them. The suggested changes in the taxation of capital gains would do much to compensate for inequities involved in the withholding technique.

The withholding technique would represent a great improvement over the system formerly applied in our federal law—that of exempting dividends received by individuals from a normal tax equivalent to the corporate rate. The exemption ignores the fact that a withheld tax is itself a part of income and should be included in the base used to measure personal tax liability. Thus, if a corporation has an income of $100,000

before taxes, all of which it aims to distribute, and if $25,000 of this is withheld for stockholders, the latter might have a surtax base of either $75,000 or $100,000. Assuming an effective surtax rate of 50 per cent, the difference in personal tax liability would be $12,500 or 12½ per cent of the income of the stockholders. Withholding ordinarily involves a tax upon a tax; that is, the inclusion of the amounts withheld in the measure of personal tax liability. There is no good reason why this should not also hold true in the application of the principle to corporate income and dividends.

Obviously, withholding as applied to dividends involves some first-rate technical difficulties of its own. Would the corporate tax legally represent a levy on the corporation or one upon the stockholder? If the former, how would withholding affect the rights of preferred as compared with common stockholders? How should the credit to individuals be applied in the case of delayed dividends such as those distributed from income earned before withholding went into effect, or when withholding rates were higher or lower than those currently applied? How should income from sources exempt from the corporate levy be treated when received by individuals? Would withholding in advance on reinvested income (unrealized to the individual) be constitutional? These and other perplexing problems would attend any real effort to integrate the corporate and personal tax effectively. The answers to these technical difficulties cannot here be attempted. Suffice it to say that the problems are not greater, probably, than those encountered in many other aspects of income taxation. If an attempt is to be made at integrating the two levies, it should accept some technical difficulties as the necessary price of an important gain in equity. Here, too, we have the advantage of Great Britain's long experience with integration.

Much could be said for an undistributed profits tax divorced from withholding, particularly if it made some allowance for the capital needs of small corporations. Considering political factors and revenue needs, the following might represent the sort of compromise which would have a chance of acceptance in the postwar period: The combination of a 15 per cent withholding levy, plus a 10 per cent levy on undistributed profits, plus a 10 per cent corporate tax of the present character, plus the application of the personal tax to capital gains in full (with some tempering of the graduated feature through averaging). Moreover, such a program would constitute a great improvement on our present tax system.

VII. *Conclusion*

It is difficult to abstract the issue of corporate versus personal taxation from the issues of taxing undistributed profits and consumption.

Suppose the question were posed as follows: Assuming that all corporate profits were distributed and that a feasible rate of taxation upon personal incomes would provide adequate revenue for the government, would you then favor a combination of personal and corporate taxes or only a personal tax system?

In capitalistic and democratic countries, progress in taxation to a large degree takes the form of perfecting the techniques and enlarging the scope of the personal tax system. This is another way of saying that progress takes the form of substituting rational for opportunistic types of taxes. Except as it applies to undistributed profits, corporate taxation belongs on the opportunistic rather than on the rational side of the tax picture.

THE TAXATION OF SMALL BUSINESS

By Alfred G. Buehler
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In this paper a number of the major tax problems of small business at the federal level will be considered. Probably never before in our history have the taxation and other problems of small business received so much attention. The financial plight of many small concerns, their struggle to do their share in the battle of production during the war, their difficulties in carrying on under the changed conditions of peacetime, the realization that our economic goals of a stable and expanding economy call for the maximum investment and employment in small as well as in large enterprises, and the political importance of our numerous small ventures have combined to stimulate interest in their problems. Many persons also believe that the continued existence of the private enterprise system requires a vigorous growth of small business activity if private business is not to be monopolized by giant cartels or to be absorbed by governmental encroachments.

No standard, generally acceptable definition of small business has thus far been formulated. It may be related to the nature of the industry, the market, the size of the investment, sales, net income, the number of employees, and other factors. The definition of small business for federal taxation must be arbitrary because it must be convenient and practicable. It cannot consider all the variable circumstances of each industry and concern. Some fairly definite factor, such as annual net income, will probably be necessary as a yardstick. At the present time, a tax differential prevails for corporations with annual net incomes below $50,000. Whether this is a proper dividing line between small- and medium-size enterprises is a debatable proposition to which I shall return later. The rates of the individual income tax, which apply to the business incomes of noncorporate enterprises, are graduated according to the bracket of taxable income and no other distinction has been made in its application to businesses of different size.

A tax system cannot be formulated with only the problems of small business in mind. However important these problems may be, they must be approached with a consideration of the economic goals of society, the effects of the tax system upon economic institutions and processes, governmental revenue needs, and other important related factors. It is a matter of fact, however, that the tax problems of small business have much in common with the tax problems of medium and large business. The taxation of all business, as well as that of little business, should be consistent with the economic and fiscal objectives of the community. All tax impediments to investment and consumption along socially de-

sirable lines, so far as it is feasible, should be removed. But all tax restraints cannot be eliminated, if our huge postwar budgets are to be balanced or even largely covered by taxation, and small business, along with other taxpayers, must submit to sacrifices. This does not mean that taxes should not be moderated for the encouragement of small business as long as a high rate of tax must be imposed upon the larger and stronger corporations to raise necessary revenues.

It is not yet evident how much tax revenue will have to be raised in the decade ahead, but it is quite clear that the postwar federal revenue system must consist of certain basic taxes, including the corporate and individual income taxes, customs duties, estate and gift taxes, excises, and social security contributions. Of these taxes, those upon corporate and individual incomes fall most directly upon small business and they will be considered in this paper. Time limitations will preclude a consideration of the other taxes but a few brief remarks will subsequently be called for concerning the excises.

So far as it can be accomplished, postwar taxation should not discriminate against the corporate form, which is advantageous to many small enterprises, or against the partnership or the proprietorship, the most popular of the forms of small business organization. The avoidance of discriminations is, unfortunately, a highly complicated and difficult goal. Postwar taxation should not prevent the birth or halt the growth of new and small ventures, invite monopoly, seriously penalize risk-taking, dull the incentives to working and investing, deprive small business of funds urgently needed to finance production, marketing, and employment, or so reduce the purchasing power of consumers that demand will dangerously decline.

The taxation of small business should be as convenient and simple as possible and the tax administration should be fair and understanding in its relations with the taxpayers, who, in turn, should co-operate fully with the administration in the accurate determination of their tax liabilities. These are, of course, principles fundamental to taxation. In general, the postwar situation calls for a revenue structure which will be basically sound in its economic and fiscal effects while raising the funds, by means of taxes which are not excessively burdensome on investment or consumption, that will be needed to balance the budget and reduce the debt at high levels of employment.[1]

Many Proposals to Tax Small Business

Numerous plans for the taxation of small business have been advanced. Indeed, one will find about as many tax nostrums as he will

[1] See also the discussion of the tax and other problems of small business in John M. Blair, Howard R. Bowen, and C. C. Fichtner, "Taxation," *Economic Report of the Smaller War Plants Corporation*, 1945.

prescriptions for the common cold. Some friends of small business have asked why it should not be exempt from taxation. Exemption is hardly feasible when workers, farmers, and individuals generally, excepting those with the lowest incomes, are subject to the federal income tax and the masses must accept the excises and other taxes that are passed on to them as a result of our huge budgetary requirements. Many small businesses are prosperous and have a taxable capacity; others can pay taxes on their incomes at moderate rates if losses are adequately allowed. A great many small businessmen apparently believe that moderate taxation rather than tax exemption is all that is required and they do not want to depend for their existence upon governmental subsidies given to them indirectly through tax exemptions.

Some persons argue that all new enterprises should be exempt from taxation for a few years at least; others would confine the exemption to manufacturing or to particular branches of manufacturing or to some other industry. Some, again, would give tax deductions to investments in new plant and equipment, and some would exempt from the individual income tax the dividends on common stock or the capital gains derived from new undertakings. In addition to their effects upon revenues, these proposals suggest many practical complications. Many exemptions are difficult, if not impracticable, to define and loopholes for tax avoidance may be created which discriminate against those most deserving aid. If new enterprises are exempt frcm taxation, small enterprises already operating may find their expansion disadvantageous and may even fall victim to the competition of the newcomers. It is not very practicable, moreover, to single out for individualized tax treatment, with special doses of tax vitamins, those weak enterprises which are having difficulty in standing on their feet.

Taxation, while frequently important, is only one of the factors which may condition the conception and growth of small businesses. The management must be competent, ample financial facilities must be available, production and marketing must be effective, and other requirements for success must be enjoyed. Tax reform, therefore, is not enough to assure a healthy growth of small business. But when tax rates are high and taxes are otherwise burdensome, because of their complications or other factors, they particularly threaten the rise of new small enterprises and the success of concerns already operating. While some small concerns may be quite profitable, enjoy established competitive positions, and have adequate financing, many others operate precariously in highly competitive fields, have uncertain earnings from a limited line of activities and meager financial resources.

Fortunately for small business, some of the reforms required for the removal of onerous and unequal taxes have already been enacted. The

excess profits tax, which tends to be most damaging to small, growing enterprises enjoying a measure of prosperity while nurturing well-established monopolies, which is highly complicated and apparently impracticable of administration as an equitable impost, and which seems warranted only as a wartime measure, has been repealed. The much criticized and obnoxious capital stock tax and its equally objectionable companion—the declared value excess profits tax—have also been abandoned by the 1945 Revenue Act. The capital stock and declared value excess profits taxes placed erratic and unfair burdens upon many small corporations with unpredictable earnings and were not based on any logical measure of benefits received from government or capacity to pay.

The Corporate Income Tax

There is no immediate likelihood that the corporate net income tax will be relinquished, much as some persons would like to see it go. It is also clear that the individual income tax will be continued. A fundamental requisite, therefore, is the more effective co-ordination of the corporate and individual income taxes, the most difficult of the technical tax problems confronting the nation, and the moderation of these taxes as they apply to the income of small business.

The 1945 Revenue Act lowered the corporate income tax rates from an existing range of 25 to 40 per cent to a range of, 21 to 38 per cent, the maximum rate being paid now, as before, by corporations with net incomes in excess of $50,000 on their entire net incomes. Thus the law continued the principle of limited rate graduation and the granting of no exemptions. The new law also continued the precedent of a large jump in the tax rate on increases in income from $25,000 to $50,000. The tax rate on the first $25,000 of net income is 23 per cent; on the next $50,000 it is 53 per cent. (These rates apply only to corporations with net incomes over $25,000 but not over $50,000.) By this formula rate graduation is stopped at $50,000 and the ratio of total tax to total income rises gradually up to a maximum of 38 per cent on an income of $50,000. However, the formula penalizes heavily increases in income from $25,000 to $50,000 and discourages the expansion of small corporations. The formula should be modified in a manner which will substantially lessen this discrimination.

The graduation of corporate tax rates occasions numerous complexities and inequalities. If the tax rate could be lowered to about 10 per cent and losses were averaged out over a period of eight or ten years, there would seem to be no compelling reason for introducting graduation. A tax rate differential is justified, however, when a high maximum tax rate is necessary, as it may be for an indefinite period, and it is found that a great number of the smaller-income corporations cannot thrive

under the load of a tax rate of 30 or 40 per cent and that such high rates also seriously retard the formation of small new ventures.

On the other hand, the size of the net income of a corporation is not necessarily indicative of the incomes of the shareholders, since many persons with small or medium incomes may own the stocks of large-income corporations and many persons with substantial incomes may own shares of small-income corporations. Nor does the amount of the income reveal the rate of return on the corporate investment. Successful small corporations frequently enjoy higher rates of return than larger corporations, but it is also true that the risks of failure are greater for the smaller corporations, as a rule, and their incomes tend to be more variable than the incomes of the larger corporations.

Some persons would employ rate graduation to check corporate growth beyond a designated income level, apparently assuming that all corporations with incomes in excess of that sum are antisocial institutions and disregarding the fact that a corporation with a net income of \$100,000 or \$1,000,000 may be quite large in relation to its competitors in a given industry but quite small, relatively speaking, in another industry. The tax rates cannot be graduated according to the badness or social undesirability of corporations but must fall indiscriminately, because of practical complications, upon all concerns in a given income category.

The tax rates imposed by the Revenue Act of 1945 upon the smaller income corporations are heavy and will apparently tend to handicap small struggling enterprises. They should be moderated further and can be, it would seem, as the lowest rates on individual incomes are lowered. There are both economic and political arguments for not lowering the tax rates on the smallest income corporations below the rates imposed upon the lowest brackets of individual incomes subject to taxation. A rough equality in the taxation of the smallest businesses can be approximated in some measure by imposing the same initial tax rates upon the incomes of the small corporations and individuals. This arrangement is far from perfect and it does not correct inequalities arising from the different treatment of undistributed income by the corporate and individual income taxes, the double taxation of dividend income, and the allowances of personal exemptions and credits for dependents only by the individual income tax. Lessening the disparity in the taxation of small corporate and noncorporate firms, however, would remove some of the disadvantages which have discouraged many small ventures from incorporating and which have encouraged some small corporations to disincorporate.

Assuming that the graduation of corporate tax rates is necessary as long as they cannot be cut to a quite moderate level, up to what income

should the graduation be applied? The decision on this point, for lack of evidence, must be somewhat arbitrary. Some have argued that rate graduation should stop at $25,000, others at $50,000, and still others at $100,000 or some other income. The higher the maximum tax rate is, the higher the ceiling on graduation will be that can logically be defended. Changes in the level of prices, the economic position of small business, and other factors will also be of importance.

In recent years rate graduation has proceeded up to $50,000 of net income but the primary goal has been to protect the first $25,000. The vast majority of corporations earning income, approximately nine-tenths of them, ordinarily have incomes not over $50,000. It has therefore been argued that rate differentiation up to $50,000 is a very generous gesture. Of course this limit on graduation is intended to apply to fairly average conditions. Probably in various branches of manufacturing it could be argued that the rate graduation should continue up to $100,000 in order to separate the small concerns from their competitors, and some observers have contended that in particular industries a much higher ceiling should be established. A factor which has frequently been emphasized is the unavailability of capital for small concerns or its relatively high cost if earnings cannot be retained in large measure for reinvestment. The problems of taxation and financing are undoubtedly related and some persons look to lower taxation as the way to assure ample capital to small businesses.

Any income standard of smallness or largeness is arbitrary and further study is needed to answer the question, is the $50,000 ceiling on rate graduation about right or is it too low or too high? With tax rates around 35 to 40 per cent, it would appear that the ceiling should not be below $50,000 and there are reasons for arguing that it should be higher for manufacturing, perhaps $100,000. The difficulty of defining "manufacturing" or some other industry renders a compromise necessary which can be applied to the various fields of activity.

When the rate graduation is allowed to benefit only the concerns with incomes below $50,000, as in the present law, concerns with higher incomes, even if they are slightly above $50,000, must pay the top tax rate, regardless of their rate of return and economic situation. The rate graduation is denied to all but the smallest-income concerns because it is felt that they alone need lower tax rates and also largely because of the deep conviction among members of the tax committees of Congress and many businessmen that this automatically precludes the possibility that rate graduation will be extended to higher levels of income as a punitive blow at the larger income corporations. The latter point of view has always seemed illogical to me. It would seem just as feasible to limit the level of marginal rate graduation by introducing a simple

scheme of marginal rate increases as a substitute for the present notch provision, with its big rate bulge on income between $25,000 and $50,000. If all corporations enjoyed the benefit of rate graduation on at least the first $50,000 of net income, medium-size concerns would benefit materially and as the income increased the tax concession would become relatively less important. The result would be, of course, that the effective tax rates, showing the ratio of total tax to total net income, would be graduated indefinitely and that no sharp line, in effect, would be drawn between small- and medium-size business.

The Incidence of the Corporate Income Tax

In this discussion of the taxation of small business nothing has been said about the incidence of the corporate income tax, which has an obvious bearing on the problem. If the tax can readily be shifted, like a sales tax, as some persons argue, the owners of the corporations can escape much of its direct burden at least. If the tax cannot be shifted, as others contend, a high rate will directly and substantially affect the funds available for reinvestment and for dividends and the inclination to assume small business risks. Over the question of corporate tax incidence there has recently been much disagreement both among economists and businessmen and there is a lack of statistical evidence to support conclusions.[2] Nevertheless, some tenative conclusions appear to be necessary because of the importance of the issues of the tax rate and the so-called "double" taxation of dividend income, first as income to the corporation and later as income to the shareholder.

Probably a part of the corporate income tax, especially when the rate is high, is ordinarily shifted to consumers and workers. The tax falls upon the interest earned on the owner's capital, which is a necessary cost over a period of years at least, and it would appear that a high rate would especially discourage the exercise of entrepreneurial ability while frequently depriving corporations of funds needed to finance their operations. Since some sellers, particularly the larger ones, have considerable control over prices, their pressure to shift taxes may be rather successful. Small concerns are frequently in a precarious competitive position and they appear to be at a handicap in shifting their taxes.

The possibilities of tax shifting appear to vary with the particular circumstances encountered by each firm and also with general economic conditions. While the effects of a corporate income tax of 20, 30, or

[2] See, for example, Richard Goode, "The Corporate Income Tax and the Price Level," *American Economic Review*, Mar., 1945, pp. 40–58; J. Keith Butters and John Lintner, *Effect of Federal Taxes on Growing Enterprises* (Harvard University Graduate School of Business Administration, 1945), pp. 7–8; Howard R. Bowen, "Taxation of Net Income from Business," *Bulletin* of the National Tax Association, 1945, pp. 72–80; and Sumner H. Slichter's statement in *Financing American Prosperity*, edited by Paul T. Homan and Fritz Machlup (Twentieth Century Fund, 1945), pp. 293–294 and 296.

40 per cent on supply and demand factors, upon investment and consumption, upon prices, and other factors are not clear, the tentative conclusion seems warranted that although a part of the tax may ordinarily be shifted, especially by the larger corporations, a substantial part of it probably burdens the owners of the smaller corporations. The moderation of the tax on the smaller corporations, if this conclusion be valid, would bring direct benefits to their owners and strengthen the competitive position of these firms. Benefits to the workers and consumers would come through increased employment and lower prices resulting from the greater activity of the smaller concerns in the competitive struggle, under favorable conditions.

To the extent that a corporation income tax might be shifted by small concerns, the process would probably be slow and painful because of the required readjustments. From the standpoint of the smaller enterprises, which are commonly at a disadvantage in tax shifting and may succeed in shifting only a part of their tax at most, it would be preferable to reduce their taxes instead of asking them to stagger along under the load of tax rates of substantial weight.

It may be suggested that a corporate income tax which is not shifted is allowed for in the prices paid by investors for securities and that a lowering of the tax rate or the mitigation of double taxation would bring windfalls to those who have discounted these factors.[3] This adds another note of confusion to an already confused situation. The capitalization process operates quite imperfectly because of the uncertainty of future taxes and interest rates on various competing investments. Moreover, the stocks of many small corporations probably change hands infrequently, if at all, and the present owners may have borne the brunt of past tax increases, and if so seem entitled to the benefits of tax reductions.

I have unduly simplified the incidence problem in this discussion and suggest the need for further study. Meanwhile, the tentative conclusions above appear to be warranted for the present.

In attempting to estimate the taxable capacity of small corporations to pay an income tax it may be significant that the corporate growth of the twenties occurred during a period when the tax rate did not exceed 13.5 per cent and the individual income tax rates were much lower than they now are. During the depression of the thirties the tax rate on small corporations did not exceed 15 per cent, except during the period when the unwelcome undistributed profits tax was added. By 1939 the maximum tax rate had been raised to 18 per cent. During no peacetime era has the maximum corporate tax rate previously been close to 25 or 30

[3] Note the statement by Roy Blough, Assistant to the Secretary of the Treasury, Address to the National Association of Cost Accountants at New Orleans, December 12, 1945, pp. 8–9.

per cent. The recent high tax rates have been a product of war financing and it is to be hoped that they may be moderated considerably for the benefit of the smaller enterprises.

Mitigating Double Taxation

As previously implied, the income of corporations going out in dividends is subject to double taxation, to the extent that the corporate income tax is not shifted. If the reasoning advanced here is tenable, there is a substantial amount of this double taxation. With a low corporate tax rate the problem would not be a serious one, but when small corporations pay taxes at rates such as those under the present law, running from 21 to 38 per cent, the problem is of material significance. Similar double taxation does not apply to interest on debt, rentals paid for property, wages, salaries, or other payments by corporations to individual income recipients. Unincorporated enterprises, whatever tax discriminations they may suffer, do escape from similar double taxation. It will probably be impracticable to eliminate double taxation because the uncertain and variable incidence of the corporate income tax will probably require a compromise which is based on a conclusion that appears to be of general applicability but may not be valid in particular cases, and also because of the great postwar revenue requirements. However, it can be, and should be, lessened materially. It discriminates against equity financing, invites borrowing, and introduces a discrimination against the owners of corporations.

To obviate the inequities and the injurious effects of double taxation, it has been suggested that small corporations should have the privilege of being taxed as partnerships with the individual income tax. This would also equalize the taxation of the income distributed in dividends and the income retained, and the decision to incorporate or not would not depend largely upon the tax costs involved. Any tax disadvantages of corporations could be avoided by exercising the option of being taxed as partnerships.[4]

It is doubtful, for constitutional reasons, if the partnership method of taxation could be made compulsory for corporations and even if its use is voluntary, legal complications must be overcome. What proportion of the shareholders must agree to accept this method, how shall undistributed income be prorated among the shareholders, how shall the ownership of stock be determined, when stock changes hands who shall be liable for the tax, and similar questions must be answered satisfactorily. Because of its complications the partnership method would probably be practicable only for the smallest concerns. For firms with rela-

[4] See "Report of the Committee of the National Tax Association on Federal Taxation of Corporations," *Proceedings* of the National Tax Association, 1939, pp. 547–548, 555, 559–560, 579–580, and accompanying comments.

tively few shareholders, who agree upon the desirability of being taxed as a partnership, important advantages might be secured. Experimentation with the partnership method to determine its desirability and feasibility should be undertaken on an optional basis.

Under certain conditions the income tax may discriminate against noncorporate undertakings and it is sometimes suggested that they should have the privilege of being taxed as a corporation. This raises further interesting problems of tax administration and compliance that call for study.

The British method of dealing with double taxation by giving shareholders a credit for the tax paid on corporate income going into dividends has a considerable number of supporters in this country. It involves a high standard tax rate and the complications of tax refunds as the price of greater equity. The British practice has a number of advantages but seems to lack sufficient popularity to secure its early adoption over here. It may also be questioned whether its implication—that the corporate income tax is not shifted to any appreciable extent—is tenable.

A relatively simple procedure for removing double taxation from dividend income would be to grant to corporations a deduction for dividends paid out that are taxable to the recipient. The result would be an undistributed income tax. Corporations generally seem to be opposed to every variety of undistributed income taxation, fearing the pressure upon them to pay out dividends if the tax rate is at all substantial and also contending that they would be deprived of the most direct and economical source of capital—the reinvestment of earnings. It is invariably objected that such taxation would be most onerous for the concerns in direst need of capital, the small firms which cannot easily resort to outside financing.

Some tax students have suggested that this last objection could be met by exempting undistributed income up to a designated amount, such as $100,000. It seems evident that if any type of undistributed income tax is adopted, unless its rate is very low, a differential in rate to protect small corporations in need of capital would be essential.

Because of revenue needs and the opposition to a high-rate undistributed income tax, if an undistributed income tax is adopted it would probably have to be imposed as a surtax levied in addition to a net income tax. If the surtax were quite moderate and an exemption for small corporations were allowed, it is possible that the plan might win quite a few supporters. However, there is a general apprehension among corporations that an undistributed income tax would take away from management the control over dividend policies and the reinvestment of earnings, a result which those who oppose corporate policies would like

to see accomplished because they believe the shareholders should decide whether earnings should be reinvested and that excessive corporation saving is an important cause of economic instability.

The most popular plan among businessmen for dealing with double taxation appears to be the giving of a credit to individual shareholders for at least part of the tax paid by corporations on their income flowing into dividends. When the individual income tax was enacted in 1913 dividends were exempt from the 1 per cent individual normal tax because corporate income had previously been taxed at the same rate. This procedure continued until 1936, although the tax rates changed, when it was abandoned for the short-lived and much criticized undistributed income tax.

One proposal assumes that it will be practicable to lower the corporate income tax rate to about 20 per cent and to impose a starting rate on individual income at the same figure. Investors would receive a credit, in computing their individual income taxes, for the full corporate tax. This implies that there is no shifting of the tax on corporate income going into dividends.[5] It may be doubted in view of revenue needs, if it will be possible to reduce the corporate tax to a flat rate of 15 or 20 per cent and there is also much doubt concerning the willingness of individuals to permit corporations generally to be taxed at the same rate as the initial rate on individual incomes.

Another proposal would tax the smallest income corporations and the lowest income brackets at the same proposed rate of 16 per cent. It apparently assumes that a substantial part, but not all of the corporate income tax, is ordinarily shifted and a compromise is suggested which would allow to shareholders, except to those with the lowest incomes investing in the smallest-income corporations, who would receive a full credit, a credit for only part of the tax paid by corporations. To avoid administrative complications, no tax refunds would be permitted.[6]

This approach to the double tax problem might produce a mild pressure upon corporations to increase their dividends, but it would presumably have much less influence upon dividend policies than an undistributed income tax of any weight. To many businessmen this seems to be an advantage; to critics of corporate policies it is a weakness.

There is no perfect solution in sight for the dilemma of double taxation of corporate dividends. For this reason the perfectionists would do nothing and would postpone action until a quite perfect plan is

[5] See Research Committee for the Committee on Economic Development, a *Postwar Federal Tax Plan for High Employment*, 1944, and Committee on Postwar Tax Policy, *A Tax Program for a Solvent America* (Ronald Press Company, 1945).

[6] See *A Program for Federal Taxes* (National Association of State Chambers of Commerce, 1945).

available. But if corporate tax rates must remain rather high, as they apparently must, and if risk-taking and investment in equity capital are to be encouraged, it appears to be necessary to at least alleviate appreciably the discriminations of double taxation. The best possible compromise, considering the economic, psychological, and revenue factors involved, should be sought and soon adopted.

The Individual Income Tax

The little factories, shops, stores, and other ventures are commonly not incorporated and our discussion must extend beyond the corporate income tax. For the owners of these enterprises the individual income tax is a business tax. With its exemptions, credits, and progressive rates it is popularly recognized as the tax which best conforms with personal ability to pay. Because of its revenue advantages and its adaptability to individual circumstances, it may properly be regarded as the major postwar federal revenue.

The individual income tax directly affects the availability of funds for new and existing small unincorporated enterprises and will, if the rates are high, also influence the incentive to risk-taking. It is regrettable that the information we have concerning the investments made by persons among the various income brackets in small concerns and the psychological effects of taxation upon investment is rather meager. Many little ventures are plainly financed by persons with modest incomes; others draw funds from the middle and upper incomes. If these little undertakings succeed, they tend to finance their activities by the reinvestment of their earnings.

Unfortunately for small business, postwar revenue needs promise to be so great that drastic cuts in the individual income tax do not appear to be feasible in the near future. The tax rates on 1946 incomes start at 19 per cent and rise to 86.45 per cent. For the normal as well as the surtax, married couples are allowed an exemption of $1,000 and a credit of $500 is allowed for each dependent. The higher exemptions for the normal tax will remove some 11,000,000 taxpayers, it has been reported, from the tax rolls.

Unless living costs rise greatly, the national income expands materially, or expenditures are slashed drastically, revenue requirements will probably call for a continuance of these exemptions and credits for the immediate period before us. Further rate reductions should be granted, if at all possible, to moderate the burdens on the owners of small business and other groups. It is to be hoped that the initial tax rate may be cut to at least 15 per cent and that the tax rates on the other income brackets may also be cut substantially, with a consideration of the effects of taxation upon the availability of funds for investment in small

ventures and the willingness to assume risks. The maximum tax rate should soon be cut to 75 per cent and subsequently to a lower figure.

A related problem, which is highly complicated and very controversial, is the treatment of capital gains in such a manner that investors will not decline to place their savings in new risks nor will those receiving capital gains be given unnecessary and unfair tax concessions. The requests of investors for a reduction in the tax rates and for greater allowances for losses should be appraised on their merits. A moderation in the taxation of capital gains seems warranted only if the individual income tax rates on other income are lowered substantially and if the lighter taxation appears desirable in order to stimulate investment.

The tax reductions on individual incomes that will be feasible are related to the taxation of corporate income, the excises, and other federal revenues. The tax system should be moderate in its application to consumer purchasing as well as to investment if economic balance is to be maintained. For this reason some tax students would eliminate virtually all the excises. If the period immediately before us promises to be a boom era, with the inflationary forces prevailing over the deflationary, there are strong arguments for imposing substantial excises both to exert anti-inflationary effects upon consumer demand and to raise badly needed revenues. When the deflationary forces prevail, of course, the excises should be cut greatly.

Offsetting Losses Against Income

The conviction has grown among tax students as well as businessmen that business income is not fairly defined for taxation by considering the income of a single year only. At the present time both corporate and noncorporate undertakings are allowed to carry their net operating losses of a given year back against the income of the two preceding years and forward against the income of the next two years until they are offset against income. This permits a five-year averaging of income.

The loss carry-back is more helpful to firms with declining fortunes than to new undertakings and firms with success ahead of them rather than behind. It involves complications for both the taxpayers and the Treasury because it requires the reconsideration of the income of prior years and the refunding of taxes previously paid. Many persons have therefore proposed that the carry-back should be dropped about two years after the war, or at most be allowed only as a one-year carry-back. There is a quite general agreement that the loss carry-forward should be extended to a longer period. This is particularly important for enterprises with fluctuating incomes alternating with losses, a situation characteristic of many small concerns. A longer averaging period would permit a more complete recovery of depreciation and other costs and a

seven- or eight-year carry-forward would be desirable. New concerns struggling to surmount the trials of infancy would not benefit immediately from the carry-forward any more than they would from the carry-back, but they would take hope in the knowledge that losses could be carried along to offset income and that no income tax would be paid until ample allowance had been made for losses.

The possible desirability of some loss carry-back, perhaps for one year, should not be overlooked in the eagerness for a longer carry-forward. During a depression the carry-forward would offer some rays of hope for the future but would not relieve the present distress of concerns suffering losses. A loss carry-back here might be of considerable significance in saving weakened enterprises.

More Liberal Depreciation Allowances

The income remaining to small business ventures after taxes, which is their measure of success, depends upon the administration of taxes as well as their rates. Small businessmen in both corporate and noncorporate undertakings frequently declare that the rates of depreciation and obsolescence allowed have been so low and inflexible as to discourage the replacement of worn and outdated plant and equipment with new and improved facilities. More liberal allowances for depreciation and obsolescence would tend to improve methods of production and would invite investment.

The estimated useful life of plant and equipment should set the minimum rates of depreciation and obsolescence, but business judgment may demand more rapid rates in order to allow for errors in judgment and to permit a quicker charging off of costs of improvements and a faster accumulation of reserves to finance new improvements. The risks of not recovering costs will be lessened if the rates of depreciation and obsolescence are increased.

A more liberal administrative attitude would readily permit the taxpayers to choose the rates warranted by their own experience and that of their industry, would remove many of the existing inequalities in the application of the law, would eliminate many sources of friction between taxpayers and tax administrators, would allow to many small enterprises the rates they should have and which their competitors, who may be more fortunately situated for fighting out claims for depreciation, may actually receive. A more liberal administrative attitude does not demand anarchy in depreciation and obsolescence. The methods followed and the rates allowed should be logically consistent. The problem appears to be mainly administrative but it may require a statutory clarification.

Conclusions

The taxation of small business should be consistent with the postwar goal of a high and increasing national income. For lack of information concerning the distinguishing characteristics of small business, its definition, for the present, must be somewhat arbitrary. For income tax purposes, a selected amount of annual net income seems to be the most satisfactory practicable yardstick.

Small business will benefit from the repeal of the excess profits tax, the capital stock tax, and the related declared value excess profits tax. As long as the corporate income tax rates must be rather high, a rate differential for the benefit of the smaller-income corporations is justified. If the maximum tax rate must remain at approximately the present level, rate graduation up to at least $50,000 of net income is desirable until more adequate information is available as a basis for selecting the proper ceiling.

That the income tax tends to remain substantially with the smaller corporations may be accepted as a tentative working assumption. Because of this tendency and the taxing of dividends both as corporate and individual income, risk-taking, financing by equity capital, and the corporate form of organization are discouraged. The double taxation should be mitigated by permitting small corporations to be taxed as partnerships and by a better co-ordination of the corporate and individual income taxes that would allow for the discriminatory double taxation.

The individual income tax rates on small, medium, and large incomes should be moderated as much as possible as an aid to small business. If necessary as a stimulus to investment the taxation of capital gains should be lightened and capital losses should be more fully allowed as the individual income tax rates are reduced.

The carry-over of net operating losses is economically sound and should be extended to a longer period. A carry-forward of seven or eight years should be allowed. The desirability of a carry-back should be studied.

A more liberal administrative policy on depreciation and obsolescence that would not retard investment and that would lessen the risks of not recovering the costs of new facilities should be adopted. This would also eliminate many of the existing inequalities in the interpretation of the law and many of the frictions that arise between the taxpayers and the administration because the taxpayers are not permitted to select the methods and rates of depreciation warranted by their experience and that of their industry.

TAX POLICIES FOR PROSPERITY

By Beardsley Ruml
R. H. Macy and Company

Our first goal today—the organization of a just and durable world peace—requires that world economic relationships be established on a humane and orderly basis. For the success of all these international plans a high level of employment and production in the United States is everywhere conceded to be indispensable. With high prosperity, we shall require large imports of raw materials, and we will find ways to obtain for ourselves the economic advantages of lower tariffs on foods and manufactured goods. With high prosperity, we shall be less greedy for foreign outlets to take up excess capacity and we shall be more willing to see our exports directed to the world's essential needs. With high prosperity, we shall more easily reduce restrictive practices and discriminatory prejudices that spring from fear and result in contempt and hate.

The first requirements for prosperity are those basic things on which all production depends; namely, raw materials, cheap and widely available power, a reliable system of transportation, a sound currency, and an abundance and variety in human skills—scientific, mechanical, artistic, and managerial. The United States is well provided with these basic requirements for prosperity. We are not so completely provided with these elements that we can isolate ourselves from the rest of the world without economic and cultural loss, but we have enough so that by trade with others we can have access to what we need and want.

The second requirement for prosperity is the organization of these basic elements into a working pattern of production and distribution. Today we see clearly that, even though all else can be organized, it is to no avail unless there is a harmonious and acceptable foundation in satisfactory labor relations. The conflicts that are now appearing are not as simple as they are sometimes described; namely, as a controversy between two adversaries, capital and labor. Today there are four parties directly at interest in the conflict—owners, managers, labor leaders, and workers—with millions of unorganized workers and small businessmen on the sidelines but by no means outside the danger zone of minor injury or disaster. The basic objective in the field of labor relations is not unlike the basic objective in the field of international relations; that is, to eliminate the use of force in the settlement of disputes and to establish in its place a system of law and justice based on consent. We cannot expect to eliminate controversy and disputes, but we can reduce the number of them and see to it that settlements are arrived at in terms of recognized principles, justly applied and adequately enforced.

Throughout the present period of tension let us keep in mind that

what we want fundamentally is to eliminate the use of force in the settlement of disputes between men in all areas, at home and abroad. Accordingly, we wish to bring into the area of labor relations, for the settlement of disputes when they arise, a system of recognized law and impartial justice administered in an atmosphere of consent. Only in this way can we attain the high level of productive prosperity under democcracy which we have set as our goal.

The third requirement for prosperity is the maintenance of an adequate, effective demand for the goods and services which we are able to produce. Even though we have all the basic elements for production and have them organized so that abundant output can be realized, nevertheless without an effective demand that will move these products into consumption, the channels of distribution will become clogged, the means of production will be made idle, mass unemployment will appear, and prosperity will fade away.

Today we are experiencing an unprecedented demand for the products of business and agriculture. This demand is the result of many years of shortages and of enormous purchasing power in the hands of the people. The demand in fact is so great that many restraints are necessary to keep it from expressing itself in an inflationary price rise. In a period such as the present, when effective demand is so great that arbitrary regulations and controls are still needed to prevent inflation, it is easy to forget that all through the thirties, and perhaps in the twenties, too, effective demand was not sufficient to move the products which business and agriculture could produce. Nor have those corrections of past policies and practices been made which would give us confidence that such periods will not come again. It is for this reason that there is need to consider national fiscal policy as a principal means of helping us to maintain a condition of high prosperity.

The importance of national fiscal policy in attaining and maintaining high prosperity is so great that there are some who overemphasize what fiscal policy can do, and who give the impression that a sound fiscal policy by itself would be a panacea for all our economic ills. This, of course, is far from the case. Measures of fiscal policy can clear the way and can facilitate; they cannot produce goods and services; they cannot give employment. They can create a situation in which high employment becomes possible as business, labor, and agriculture find the way. But all the favorable conditions with respect to basic elements and to the organization of men and materials for work will be unavailing if effective demand is insufficient to keep the wheels turning.

We must recognize that the objective of national fiscal policy is above all to maintain a sound currency and efficient financial institutions; but consistent with this basic purpose, fiscal policy should and can con-

tribute a great deal toward obtaining a high level of productive employment and prosperity.

If a constructive over-all fiscal policy is to be legislated and administered, corrective measures must be adopted by the government in both the legislative and executive branches. At this time, even if a fiscal and monetary policy to complement and supplement the activities of private business were generally agreed upon, there is no possibility under the present organization of the federal government of its being made operative or effective.

Since taxation is one of the most important parts of fiscal policy, let us discuss basic policy for federal taxation.

During the war we have learned many things about taxation in its relation to fiscal policy. If we look at the financial history of recent years it is apparent that nations have been able to pay their bills even though their tax revenues fell short of expenses. Those countries whose expenses were greater than their receipts from taxes paid their bills by borrowing the necessary money. The borrowing of money, therefore, is an alternative which governments use to supplement the revenues from taxation in order to obtain the necessary means for the payment of their bills.

A government which depends on loans and on the refunding of its loans to get the money it requires for its operations is necessarily dependent on the sources from which the money can be obtained. In the past, if a government persisted in borrowing heavily to cover its expenditures, interest rates would get higher and higher, and greater and greater inducements would have to be offered by the government to the lenders. These governments finally found that the only way they could maintain both their independence and their solvency was to tax heavily enough to meet a substantial part of their financial needs, and to be prepared—if placed under undue pressure—to tax to meet them all.

The necessity for a government to tax in order to maintain both its independence and its solvency is true for state and local governments, but it is no longer true for a national government. Two changes of the greatest consequence have occurred in the last twenty-five years which have substantially altered the position of the national state with respect to the financing of its current requirements. The first of these changes is the gaining of vast new experience in the management of central banks. The second change is the elimination, for domestic purposes, of the convertibility of the currency into gold.

Final freedom from the domestic money market exists for every national state where there exists an institution which functions in the manner of a modern central bank, and whose currency is not convertible into gold or into some other commodity.

The United States is a national state which has a central banking

system, the Federal Reserve System, and whose currency for domestic purposes is not convertible into gold or into any other commodity. It follows that our federal government has final freedom from the money market in meeting its financial requirements. Accordingly, the social and economic consequences of any and all taxes have now become the prime consideration in the imposition of taxes. National states no longer need taxes to get the wherewithal to meet their expenses. Therefore, since all taxes have consequences of a social and economic character, the government should look to these consequences in formulating its tax policy. All federal taxes must meet the test of public policy and practical effect. The public purpose which is served should never be obscured in a tax program under the mask of raising revenue.

Federal taxes can be made to serve four principal purposes of a social and economic character. These purposes are: (1) as an instrument of fiscal policy to help stabilize the purchasing power of the dollar; (2) to express public policy in the distribution of wealth and of income, as in the case of the progressive income and estate taxes; (3) to express public policy in subsidizing or in penalizing various industries and economic groups; and (4) to isolate and assess directly the costs of certain national benefits, such as highways and social security.

In the recent past, we have used our federal tax program consciously for each of these purposes. In serving these purposes, the tax program is a means to an end. The purposes themselves are matters of basic national policy which should be established, in the first instance, independently of any national tax program.

By all odds, the most important single purpose to be served by the imposition of federal taxes is the maintenance of a dollar which has stable purchasing power over the years. Sometimes this purpose is stated as "the avoidance of inflation"; and without the use of federal taxation all other means of stabilization, such as monetary policy and price controls and subsidies, are unavailing. All other means, in any case, must be integrated with federal tax policy if we are to have tomorrow a dollar which has a value near to what it has today.

The war has taught the government, and the government has taught the people, that federal taxation has much to do with inflation and deflation, with the prices which have to be paid for the things that are bought and sold. If federal taxes are insufficient or of the wrong kind, the purchasing power in the hands of the public is likely to be greater than the output of goods and services with which this purchasing demand can be satisfied. If the demand becomes too great, the result will be a rise in prices, and there will be no proportionate increase in the quantity of things for sale. This will mean that the dollar is worth less than it was before. That is inflation. On the other hand, if federal taxes

are too heavy or are of the wrong kind, effective purchasing power in the hands of the public will be insufficient to take from the producers of goods and services all the things these producers would like to make. This will mean widespread unemployment.

Briefly the idea behind our tax policy should be this: that our taxes should be high enough to protect the stability of our currency, and no higher. Putting it another way, our taxes should be as low as they possibly can be without putting the value of our money in danger of inflation. The lower our taxes are, the more purchasing power will be left at home in the hands of the people—money that can be spent by them for the things they want to buy, or that can be saved and invested in whatever manner they choose.

Now it follows from this principle that our tax rates can and should be lowered to the point where the federal budget will be balanced at what we would consider a satisfactory level of high employment. If we set our tax rates any higher than this, we are reducing unnecessarily the money that private individuals will have to spend and to invest; and, therefore, we make it more difficult for ourselves to get to high employment and to stay there. There is wide agreement that a satisfactory high level of postwar employment in the United States means a national income at present price levels of at least 140 billion dollars, and so we should set our tax rates to balance the budget at a national income of 140 billion, and not at 120 billion or some lesser figure. We do not want our tax system to work against us all the way up to high employment. In fact, we may never reach high employment if we set our tax rates too high.

Obviously, taxes should be reduced where reduction will do the most good in creating consumer demand and in encouraging private investment.

The first taxes that should be eliminated are taxes on consumption—except when these are imposed for regulatory purposes. If it is true that our prime objective is to increase the standard of living of the masses of the people, what better way can be devised than leaving with the people the income which is already in their hands? What method of getting purchasing power back to the people is politically as acceptable as leaving it with them in the first place?

Next, and to some this seems a curious conclusion, the corporation income tax should be abolished. At the same time, measures must be adopted so that the corporate form of doing business will not be used as a device to avoid payment of individual income taxes or as a means of building up unneeded and unused corporate surpluses, or to secure tax advantages over unincorporated businesses.

As a matter of fact, after sales taxes and excises, the corporation in-

come tax weighs most heavily on the standard of living of the people; and at the same time it obstructs the flow of savings to investment.

It is impossible to know exactly who pays how much of the tax on corporation profits. The stockholder pays some of it, to the extent that the return on his investment is less than it would be if there were no tax. But it is equally certain that the stockholder does not pay all of the tax on corporate income. Indeed, he may pay very little of it. After a period of time, the corporation income tax is figured as one of the costs of production and it gets passed on in higher prices charged for the company's goods and services, and in lower wages, including conditions of work which are inferior to what they otherwise might be.

The reasons why the corporation tax is passed on must be clearly understood. In the operations of a company, the management of the business, directed by the profit motive, keeps its eye on what is left over a profit on its invested capital. Since the corporation must pay its federal income taxes before there are any net profits, taxes are thought of—the same as any other uncontrollable expense—as an outlay to be covered by higher prices or lower costs. Since all competition in the same line of business is thinking the same way, prices and cost will tend to stabilize at a point which will produce a profit, after taxes, sufficient to give the industry access to new capital at a reasonable price. When this finally happens, as it must if the industry is to hold its own, the federal income tax on corporations will have been largely absorbed in higher prices and in lower wages. The effect of the corporation income tax is, therefore, to raise prices and to lower wages by an undeterminable amount. Both tendencies are in the wrong direction and are harmful to the public welfare.

Can the government afford to give up the corporation income tax? This really is not the question. The question is this: Is the corporation income tax a favorable way of assessing taxes on the people—on the consumer, the workers, and investors—who after all are the only real taxpayers? It is clear from any point of view that the effects of the corporation income tax are bad effects. The public purposes to be served by taxation are not thereby well served. The tax is uncertain in its effect with respect to the stabilization of the dollar, and it is inequitable as part of a progressive levy on individual income. It tends to raise the prices of goods and services. It tends to keep wages lower than they otherwise might be. It reduces the yield on investment and obstructs the flow of savings into business enterprise. The elimination of the corporation income tax from the tax system will increase the effectiveness of our fiscal and monetary policies and, by broadening markets for goods and services, will strengthen business for its task of producing goods, providing employment, and giving the people a place where their savings can be invested.

Once the tax machine is remodeled in the postwar period, every effort should be made to keep the tax system simple and understandable. Constant tinkering with the tax structure only serves to produce confusion, uncertainty, and expensive administration.

Although we must accept the existence of deficits in times of unemployment, they will be only in proportion to the emergency. The tax policies suggested do not contemplate permanent budget deficits as a necessary element in the economy. On the contrary, they allow for the possible overexpansion of private business activity which would be checked by public debt retirement. These policies do not require, nor do they justify, spending for its own sake, nor do they approve wasteful expenditure.

I have stated as basic tax policy the proposition: Reduce taxes to balance the budget at high employment at high employment. This simple statement requires some clarification if it is to be applied properly in policy making. The fact is, and I confess it shamelessly, the term "budget" is highly ambiguous; and I would not use it at all if another term, which I shall presently define, were popularly understood and generally acceptable.

First of all, we must reconsider what we are to mean by the term "budget." In the interest of clarity, I propose that we confine the term "budget" to those financial arrangements that from time to time fall under the jurisdiction of the Director of the Federal Budget. This conception, although clear and precise, limits the significance of the budget for fiscal and monetary policy to a subordinate, though important, position.

It is apparent that the "budget" in this sense has neither economic, monetary, nor financial significance except as it is a part of a larger whole. Its significance is of an *administrative* character, and the balancing of this budget is nothing but the balancing of accounts which have been associated for administrative convenience. There are, therefore, no intelligible issues of a financial or economic character associated with the budget as here defined.

It is possible, however, to extend the concept of the budget, that is, of financial planning, to include all the financial transactions of the federal government. Let us term this comprehensive concept the "superbudget." The superbudget would include not only the budget as we have defined it, but also social security and other trust accounts, including the current operations of the several federal corporations, such as the Export-Import Bank and the Commodity Credit Corporation, which are not part of the budget today. The term "superbudget" should not be taken to imply anything with respect to its absolute magnitude, but only to its comprehensiveness.

The federal government has the power to associate the totality of its

financial transactions in a single schema, and accordingly it has the ability to judge one item against another item and each item against the whole. The federal government may then have a *policy* with respect to the superbudget and this policy, when it exists, may be termed the fiscal policy of the federal government. The fiscal policy, since it would apply to the superbudget, would thus include, as parts, the budget policy, the tax policy, the lending policy at home and abroad, the borrowing policy, and so forth, and would transcend these particular policies in associating them within the superbudget as a whole.

In order to understand how the superbudget is related to the financial and economic activity of the national community, it is necessary to make an additional distinction between what may be termed the "dollar" and the "income" superbudgets. The dollar superbudget is what we see if we look at a piece of paper which has the superbudget written on it. It would consist of the items of receipts and disbursements together with the dollar amounts associated with each item. This dollar superbudget is thus a projection of planned financial transactions and as such its significance is primarily financial.

But in addition to being a projection of financial transactions, below the surface the superbudget is also a projection of impacts affecting the national income. The character of this projection is not apparent on the surface figures of the superbudget, and can be judged only by an estimate of what lies beneath; that is, by the development of an "income" superbudget. The income superbudget, being a projection of intended impacts affecting the national income, has a significance which is primarily economic.

The dollar superbudget may be stated precisely; the income superbudget can only be approximated within wide margins of error. Yet in spite of the approximate character of the income superbudget, fiscal policy must take both into account, because they are different in kind and cannot be used interchangeably.

The size of the income effect for any category of receipts or disbursements will differ from time to time; it may indeed be positive or negative with respect to certain financial transactions. Obviously, the selection of a particular coefficient for a particular financial transaction at a particular time must be based on judgment flowing from examination and analysis of such statistical and nonquantitative evidence as may be or may become available.

Skepticism exists in many quarters as to the possibility of income superbudget construction on the ground that the income effects are not precisely known and can never be known. This skepticism is justified if it is intended as a warning against treating the income superbudget with the same certainty as the dollar superbudget, or anywhere near it; the

skepticism is not warranted if it discourages a study of the logical consequences of financial decisions made manifest in the dollar superbudget, or if it prevents us from drawing broad conclusions as to desirable fiscal policy within wide margins of estimate.

As a final answer to those who object to the use of the income superbudget because of its necessarily approximate character, it should be pointed out that the income effects of financial transactions exist whether they have been estimated or not, and the economic realities disclosed by the income superbudget exist, whether it has been set up or not. It should also be pointed out that only the income superbudget has relevance to over-all economic analyses affecting fiscal policy and national income. Accordingly inferences with respect to fiscal policy and national income which are drawn from the figures of the dollar superbudget are in fact based on a most improbable assumption; namely, that the dollar and the income superbudgets are identical and can be used interchangeably; or to put it another way, that for all classifications of receipts and expenditures the income effects are equal. This, I submit, is obviously not true.

The definitions, distinctions, and inferences we have made so far may be summed up as follows:

1. The term "budget" has been limited to the projected financial transactions under the jurisdiction of the Bureau of the Budget, and the term "superbudget" has been introduced to refer to the totality of financial transactions under the control of the federal government.

2. Questions of fiscal policy are related, not to the budget, but to the superbudget, since here the total financial impact of the federal government on the economy is projected; from this impact economic consequences may be inferred, and in the power to vary the impact, and the economic consequences, national fiscal policy can be expressed.

3. With respect to the superbudget, we have distinguished between the dollar superbudget and the income superbudget. (a) The dollar superbudget is a projection of planned financial transactions and as such its significance is primarily financial. (b) The income superbudget, flowing from the dollar superbudget, is a projection of impacts in their effect on the national income and as such its significance is primarily economic.

4. Because of the varying incomes effects of the several items of the superbudget, the dollar and the income superbudgets are not the same and cannot be used interchangeably.

5. Accordingly, questions of fiscal policy must be separately considered as they affect the one superbudget or the other.

Much of the controversy with respect to national fiscal policy arises from a failure to distinguish between (a) the *dollar* and (b) the *income*

superbudgets and to separate the issues that are relevant to the one from those that are relevant to the other.

We can now restate our basic tax policy precisely as follows: *Tax rates should be set to balance the income superbudget at high employment at high employment.*

Let me repeat, our preoccupation with fiscal policy in these remarks should not cause us to overrate these problems of policy, important as they are. Fiscal and monetary measures are primarily facilitating mechanisms that help us to perform or to prevent actions, the merit of which should be judged in other terms of reference. Decisions as to the sources of federal revenues, the objects of federal expenditures, the magnitude of the superbudget itself—these involve questions of public policy that transcend fiscal policy. But we should be sure—and here fiscal policy is important—that defective fiscal policy and practice no longer obstruct us in accomplishing the purposes which we, as a nation, have set for ourselves.

It seems to me that great promise for the future may lie in the consideration of these dollar and income superbudgets, for they provide a clue as to how a positive fiscal program can produce desirable economic effects within a framework of financial prudence.

It is clear, for example, that a fiscal program should arise from an explicit fiscal policy, the various parts of which are internally consistent. It is clear that decisions as to program will have to be based partly on fact and partly on judgment. It is clear that the administration of the program will require the action of several agencies working together as a team.

Here, at the point of fiscal and monetary policy, where the relations between government and business are of the greatest importance for the working out of peacetime employment and production problems, business may properly be apprehensive. It may be apprehensive, not that the intentions of government will be hostile or even indifferent, but that, unless the preparatory organizational work is done now, the federal government will be helpless in executing even the most elementary collaborative program.

Business wants a federal fiscal policy that will help it create good products, good jobs, and good investments. Business does not expect a national fiscal policy to do the work of business for it. It does ask for cooperation in maintaining a flow of purchasing demand that will have some general correspondence to what agriculture, labor, and business are able to produce and to distribute.

With such a flow of purchasing demand, we can avoid regimentation, maintain a high level of employment, and raise the standard of living to new heights for all the people.

DISCUSSION

ROY G. BLAKEY: Perhaps my comments on the papers of Professors Groves and Buehler would be more spirited if I had more violent differences of opinion. I find myself in substantial agreement with most of their expositions and recommendations. Most of the matters on which we disagree are not extremely important, or they are so difficult of solution that a judicially minded person cannot be too dogmatic about them. In my opinion, the most important shortcoming of both papers is the wholly inadequate discussion of the basic question of the incidence of taxes on business, and particularly of taxes on corporations.

After a few brief comments on other points in the two papers, I will devote my very limited time to a few comments on incidence.

As Professor Groves says, the proper allocation of tax levies upon various corporations, partnerships, and sole proprietorships cannot, as a practical matter, be entirely justified on the basis of benefit, or on the basis of ability to pay, or, for that matter, on the basis of any single criterion. The importance of different criteria varies with different taxes and with different circumstances. Each pertinent factor should be given due weight in view of all other facts in each particular case. This requires much wisdom and the ability to adjust all political and other pertinent pressures; hence it is obvious why actual tax decisions and actions are seldom perfect. It is thus seldom or never possible to achieve complete tax equity, or to be entirely fair in determining what rates of taxation shall be levied upon corporations, partnerships, and sole proprietorships. This is particularly true in the United States in view of conflicting court decisions affecting the taxation of corporate income; that is, relative to the corporate entity, on the one hand, and relative to looking through veils and forms and considering the real essence of things, on the other hand.

In spite of all of these and other difficulties, however, it is generally agreed that each of these three forms of business organization (not to mention others) has certain peculiar economic and social advantages which vary with different conditions and that, by and large, it is unwise to discourage the use of the most desirable forms of business organization by punitive taxation or even by arbitrary tax requirements.

With respect to the graduation and increasing of tax rates on business it is my opinion that it would be in the public interest to reverse the trends of the last dozen years; that is, to lessen the graduations and the other discriminations against corporations, and to treat those engaged in the three leading forms of business organization much more nearly on an equality than in the recent past. Ability to pay and benefit received from government services are individual or personal matters and can be reached much more accurately and equitably through individual or personal taxation than through business taxation of the types we have employed lately.

This is a renewal of a suggestion I made at the 1927 meeting of the American Economic Association in a paper on the "Simplification of the Income Tax." This suggestion has had numerous other advocates during

the last two or three years. But we are not entirely ready yet, either politically or administratively, for the simplification recommended years ago and now again. Meanwhile, we should make the best compromise adjustments that are feasible in view of all the pros and cons.

Professor Buehler's paper on the "Taxation of Small Business" is not quite so concise and direct as the paper of Professor Groves, though I agree with most of its specific recommendations. For example, I think it would be well to try the experiment of giving small corporations and their stockholders the option to be taxed like partnerships and their partners. It seems, however, that there are other and better methods in some cases.

On general principles, I am strongly opposed to subsidies chiefly because they are so commonly and flagrantly abused. There are, however, strong arguments for lessening temporarily tax restrictions on promising new growth industries, especially in the early stages when development is greatly handicapped by the difficulty of securing much needed capital for expansion of plant, employment, and production. In my opinion, giving new, efficient industries a fair chance to develop is necessary in order to: hold monopoly in check; make free competition effective; assure the best utilization of human and other resources; give maximum employment at highest possible wages; in fact, to prevent the decline and decay of private enterprise, and to provide the high standards of living which it makes possible.

The present federal tax laws, and most of the better known postwar tax plans have some provisions for assisting small business. This is true of the C.E.D. plan, the two National Planning Association proposals, the Twin City plan, and particularly the Cornelius Job Credit Tax plan—a relatively recent proposal of a young Minneapolis inventor and manufacturer.

I think the latter proposal has some special merits in that it tends to encourage the most efficient new enterprises rather than all small businesses regardless of their needs or merits. The inefficient enterprises are not encouraged by this plan and hence such enterprises will not have to be carried along indefinitely and thus act as a drag on the economy, as would be the case under most postwar tax plans.

Now, I want to mention a few points relating to the incidence of business taxes, particularly about the incidence of taxes on corporations. Although both Professors Groves and Buehler mention incidence briefly, instead of evading the subject entirely, as do many who discuss business taxation; nevertheless, like too many others, they also shy away from the subject quickly after making a few remarks about the difficulty or impossibility of saying anything that is certainly true about incidence, except that we shall know little that is really important about business taxation until somebody makes a more thorough study of incidence.

Professor Buehler did go so far as to say "the tentative conclusion seems warranted that although a part of the tax may ordinarily be shifted, especially by the larger corporations, a substantial part of it probably burdens the owners of the smaller corporations." He goes on to add what he terms other "notes of confusion" and ends by saying: "I have unduly simplified

the incidence problem in this discussion and suggest the need for further study. Meanwhile, the tentative conclusions above appear to be warranted for the present. . . . The recent high tax rates have been a product of war financing and it is hoped they may be moderated considerably for the benefit of the smaller enterprises."

It seems to me that what are most needed by the many who are still groping about in the incidence fog are: (1) the knowledge or recognition of a few guiding or fundamental principles; and (2) adequate representative samples of basic factual data to which to apply the principles or general rules.

Following are some of the important principles or general truths affecting the incidence of taxes on business.

There is what is sometimes called the "principle" or "law" of the tendency toward the equalization of profits or of net incomes, particularly in a static state under conditions of competition. There is the opposing principle or general truth of the tendency of every business and of every individual to take advantage of his or its special opportunities to maximize his or its income through a greater or lesser degree of advantage (or monopoly). With equal ability and equal opportunity on the part of all and with their continued maintenance in a static state there would be continued equalization of incomes.

In such a static state, a new universal tax would be equally diffused without shifting; the burden of a special tax would be equalized in time, depending upon frictions, that is, upon the fixed capital and labor costs, or one might say upon the fluidity or viscosity of the conditioning forces. Or one might say, depending upon the short- or long-run character of the monopolistic forces introduced by the dynamic changes caused by new taxes. Every special advantage or disadvantage introduced by an unequalizing factor creates a degree of monopoly (as opposed to pure competition which works for equalization).

In a dynamic universe we never have a wholly static or purely competitive economy, nor in a democratic regime do we ever have a complete, unregulated monopoly. Even in a so-called "monopolistic" economy, the monopoly is not likely to be complete. The greater the degree of monopoly, especially in a system of private enterprise, the less the tendency toward the equalization of profits. The greater the degree of monopoly the greater the power to control prices and profits but not necessarily the greater the advantage of shifting taxes.

It may be of interest to consider momentarily a topic much discussed in recent months; namely, the shifting of excess profits and corporate income taxes, or, to put the question in reverse, to ask who will get the benefit of the repeal or reduction of such taxes and in what proportions—the stockholders, the employees, or the consumers of the products? Without going into the details of analysis at this point, it is obvious that the answer depends in large part upon the measure of monopoly exercised by each of the several interests mentioned. The curves of demand and supply of the several products will also be of crucial importance. The shifting will depend

also upon many other things, such as changing tastes and the height and distribution of incomes. There will be space here for mention of only a few specific illustrative principles and requirements necessary to determine the incidence of profits or commodity taxes.

As is well known by tax students, under perfect competition the tendency is to shift the entire tax levied per unit of commodity produced at constant cost; something less than the entire tax upon a commodity produced at increasing cost; and something more than the tax upon a commodity produced at decreasing cost. In the two latter cases the proportion of the tax that will be shifted depends upon the elasticity or the slope of the demand curve, though the indefinite extension of decreasing costs leads to monopoly.[1]

Though the ability of a concern to raise prices depends upon the completeness of its monopoly, in numerous cases it does not pay a monopoly to shift as large a proportion of a new tax as a competitive business is compelled to shift in order to avoid bankruptcy. For example, it does not pay a complete monopoly with perfect monopoly prices to shift any part of a flat tax consisting of so many dollars, regardless of output, or any part of a percentage tax on net profits or net income. It could raise its prices and lessen its taxes in case of a percentage tax on profit, but it would lessen its profits after taxes by doing so, more than if it absorbed the entire tax.

Joan Robinson and others have shown that it would pay a perfect monopolist to shift half (not more or less) of a commodity unit tax under conditions of constant cost and a straight line demand curve, whereas it would pay a competitive business to shift the entire tax under such conditions. In the cases of increasing and decreasing costs, and/or of other than straight line demand curves, it would pay perfect monopolists to shift proportions of the several taxes different than the proportions in the case of competitive businesses.

By fitting the marginal revenue curve to each set of demand and supply curves,[2] one can show accurately how every such tax will tend to be shifted. The time required for such shifting to reach stability, both under competition and monopoly, will depend upon various frictions, or liquidities, much as the time it takes for molasses to reach a level depends upon its composition, the temperature, etc.

Many of the claims that the incidence of taxes, especially the incidence of taxes on business, are uncertain and indeterminable are unreasonable claims. Of course, it is true that one can tell little about such incidence if he knows nothing of the laws of supply or demand for the products of the business in question. But if he can plot accurately the supply and demand curves, and if he can fit the marginal revenue curves as mentioned above, he can tell the incidence of commodity taxes quite accurately. If he can approximate these curves, he can approximate the incidence. But if he has

[1] However, decreasing costs never continue forever with unlimited expansion of output.

[2] As Joan Robinson shows how to do in her *Imperfect Competition*. By the way, most of these techniques of Robinson, Chamberlin, and other recent writers are developments and applications of those introduced and indicated many years before by Cournot, Edgeworth, Marshall, and others.

no basic facts, or inadequate representative facts, he has not the data to which to apply the fundamental principles. He would be somewhat in the position of a physicist or chemist or astronomer with inadequate and undependable data. Even an expert in a so-called "exact" science would not be expected to make an accurate estimate or forecast if he had inadequate data to which he could apply well-established principles. How much less reasonable it is to disclaim against the uncertainty of the incidence of mercurial or dynamic human or social pressures.

Those of us who want to overcome the uncertainties about incidence in the future should increase our knowledge of principles and also of the basic but very dynamic facts of supply and demand in specific situations. General knowledge of such principles and facts would doubtless improve greatly the knowledge of incidence and probably lead to much greater regulation if not reduction of monopoly.

THE PROBLEM OF "FULL EMPLOYMENT"

FACTS, ISSUES, AND POLICIES

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I. *The State of Professional Opinion*

Professional opinions on full employment, while not scattering so much as lay opinions, still differ widely. Many of these differences are unreasonable; but speaking as a rather active participant in the professional debate, I am inclined to hold that on many of the key issues there are two (or more) thoroughly reasonable positions. The first thesis of this paper is that this disagreement on key issues is a testimonial to the impossibility of eliminating uncertainty, and that the profession has an obligation to be more concerned with mapping out the field of uncertainty with which policy must reckon than with working out single-valued "best answers."

Full employment is best regarded as an aspect of a larger complex called "general economic stabilization," involving avoidance of serious price-level fluctuations as well as of unemployment.

Since any pragmatic test of the degree of success of a full-employment program is bound to turn upon evidence about unemployment, professional definitions (as distinct from propaganda) hinge on absence of nonfrictional unemployment; estimates of the amount of unemployment and employment involved are essentially illustrative. The best professional usage seems to regard employment as "full" when unemployment is "empty"—except for a minimum reflecting frictions. How much unemployment this means (let alone how much employment it means) can be determined only by experience. It is a reasonable and illuminating guess, however, that as of 1950 it means $1\frac{1}{2}$ to 3 million unemployed and 54 to 57 million civilian employed.

Measures proposed to support employment are largely of such a character as to put upward pressure on price levels. Measures designed to thwart an upward drift of prices are likely to be of such a character as to increase unemployment. Neither the objective of full employment nor the objective of price-level stability, consequently, can be pursued with complete single-mindedness. Policy problems are seen in better perspective if both objectives are viewed as aspects of general economic stabilization.

[1] The author is an economist in the Research Division, Committee for Economic Development. This paper is strictly an expression of the author's individual views, which do not necessarily coincide with those of the Committee or of other members of the Committee's staff. The author is obliged to several colleagues—in particular M. G. de Chazeau, P. H. Douglas, H. B. Myers, J. H. G. Pierson, S. H. Slichter, and A. R. Sweezy—for criticisms which helped guide the revision of this paper; but needless to say, they cannot be held responsible for the outcome.

The dispersion of professional opinion is most easily expressed by a list of questions on which disagreement is widespread. The list which follows (though not exhaustive, in the nature of the case) is aimed to cover the most important areas of disagreement outside the statistical field:[2]

1. *Incentives and markets.* How should emphasis be distributed between the degree to which "markets" are adequate and the degree to which production and employment are encouraged by "climate" and "incentives" (including in the latter both the effects of government "interferences" and the general atmosphere of approbation or disapprobation toward business management)? As a branch of this question, how far is it reasonable to attribute unemployment to failure of individuals, industries, or local communities to make appropriate adjustments to changing markets?

2. *The snake, the worm, and the bureaucrat.* In D. H. Robertson's terminology, to what extent does unemployment reflect the "snake" of economic fluctuations; to what extent the "worm" of "stagnation"? How far do fluctuations (or stagnation) reflect characteristics of the economy itself, and how far outside factors—particularly ill-judged government policies?

3. *Impersonal versus direct controls.* How seriously should we take the case for the preferability of impersonal controls (monetary-fiscal, in particular) over direct controls involving intervention in individual private transactions? Supposing maximum use of impersonal controls, how far does the adequacy of a stabilization program depend on supplementation by direct controls? How is the adequacy of such a program affected by the scope of the area of direct government operations?

4. *Forecasting.* How reliable are the best available techniques for forecasting (a) employment and price-level developments and (b) the effects of policy measures upon them?

5. *Automaticity.* How near can a well-designed policy come to making the economy self-stabilizing within a reasonable range via such "automatic stabilizers" as unemployment compensation, pay-as-you-go taxes, and monetary reserve schemes?

6. *Capacity of government to take stabilizing action.* How rapidly is government stabilization policy likely to be called upon to shift direction, to cope either with fluctuations beyond the capacity of the "automatic stabilizers" or with apparent stagnation or persistent inflationary pressure? How far should the economist take for granted the ability of Congress to take appropriate measures with appropriate timing (and with appropriate provisions for flexibility through later amendments or

[2] I do not feel justified in taking space here to discuss the more strictly quantitative disagreements, having had an opportunity to analyze them in the article on "Model-Building and Fiscal Policy," *American Economic Review*, Sept., 1945, pp. 531–558.

through administrative discretion)? How far is he bound to include inflexibility of government policy among his data?

Disagreements on these questions are interwoven with quantitative disagreements about the magnitudes of the economic forces policy will have to deal with. Both sets of disagreements can be calibrated roughly on a political scale (defined, say, by the C.I.O. position at the "left" and the N.A.M. position at the "right"). But the differences cannot be explained away by attributing political motives to the economists involved. Differences in the average degrees of "leftness" one would assign to economists by scoring their attitudes on such a list of questions would probably prove smaller than the dispersion existing within the individual sets of responses from individual economists. Almost all economists would doubtless be found much further "left" on some questions than on others; many economists would insist on qualifying their responses in such a way that the range of answers they thought reasonably likely to be correct would cover a good part of the political scale.

Examination shows that both the questions listed above and the quantitative questions with which they are interwoven are of a sort which do not yield simple and single-valued "correct answers." They cannot be answered except in terms of facts—drawn from the record and applied to the future. But the record is fragmentary; and if we knew how to answer these questions for past periods we should still be in doubt how far the same answers would hold for the future. Normal doubts on the relevance of past experience are intensified by the radical break of continuity imposed by the war.

The presumption that there is a "correct answer" to an economic problem which should be obtained by any soundly organized inquiry is a useful fiction in economics. It provides incentives to check individual investigations for internal errors, and to look for confirmation or contradiction in the results of individual investigators. But when one considers the degree to which what we calmly call "economic facts" are actually heroic simplifications of our observations,[3] we must expect to find that investigators working from the same observations will put "facts" into their logical machines which have substantially divergent logical content; and unless they commit logical blunders, their findings as to the "correct answer" must diverge.

Of course every question involving uncertainty has in principle an answer which is "best" in the sense of being more likely to be true than any alternative answer. But the probability that this best answer will

[3] The fact that individual J made and received certain payments in the year 1939 is too small a fragment of evidence for the analytical machine to get its teeth into. But if we proceed to the "fact" that all consumers in 1939 had a disposable income of $67.7 billion and spent $61.7 billion, we are dealing with a construction, which can really fill the logical place we assign to it in our reasoning only if we accept a number of assumptions incapable of verification.

closely approximate the truth may be very low indeed. It is much less important to know the precise location of the "best" answer than to know how wide is the range of reasonably likely answers.

Disagreements of competent investigators about best answers to key questions are common. In terms of the profession's public relations, this may be a misfortune; but it would be a worse misfortune to have unanimous agreement on an answer whose falsity would soon be demonstrated by experience! It is worth some effort to avoid putting data before the public in forms which exaggerate the disagreement—for example, estimates of full-employment and national product based on radically different price levels and not brought into relation with comparable estimates by appropriate deflation. But the sense that real disagreements as well should be hurried out of sight can do a good deal of damage. The attempt to base all government policy pronouncements in later 1945 on an assumption that income payments in 1946 would approximate 130 billion dollars, for example, obscured real differences of estimation which in themselves contained useful guides to policy.

In view of the complexity of economic problems, the best way to map out a field of uncertainties is commonly to set up a battery of alternative sets of assumptions (each treated hypothetically as certain) and see how wide the range of consequences is from the reasonably plausible sets of assumptions. One way to do this is to set out cold-bloodedly to design such an assumption-battery; the other is to confront the results of independent investigations. Commonly it takes a mixture of these procedures to give reasonable security against bias. But the undue value placed upon single-valued results tends to discourage both. Particularly where different investigators are in touch with each other, they are subjected to a temptation to forecast each other's forecasts rather than the magnitude they are supposed to be estimating.[4]

The fact of uncertainty is one of the key data for planning, public or private. The fact of disagreement among results obtained by adopting different sets of plausible assumptions is the main piece of evidence available on the character and degree of uncertainty. This evidence should be valued and used, not discarded or suppressed.

II. *Adaptability of Policy to Face Uncertainty*

The common-sense response to uncertainty is to design a policy which is adaptable over the range of reasonably likely conditions, and to watch vigilantly for evidence to guide adaptations. To concentrate all attention on the most likely conditions and a policy which will fit those con-

[4] An anonymous observer of government affairs said to me once, in an ill-tempered moment, that to get two genuinely independent estimates of any magnitude in Washington you had to be sure they were both from the same office!

ditions, without providing adaptability, is very risky. To give one relevant example, tax cuts which involved drastic reduction of the number of taxpayers on the rolls and dismantling of tax machinery might prove disastrously inappropriate if inflation took hold. In general, the characteristics which give a plan of action adaptability to unexpected circumstances are often characteristics which would not enter any plan laid out to meet definitely forecast developments.[5] Consequently we must not expect to arrive at sound policy by splitting the difference among policy proposals designed to meet contingencies the authors of the proposals have treated as certain.

Flexibility to permit needed adaptations may to some extent be built into the structure of government operations. But conscious adaptation from time to time is also needed. The design of monetary-fiscal policy must take both types of adaptability into account.

On the side of built-in flexibility, possibilities are substantial, but not sufficient for economic stabilization. Providing built-in flexibility means setting up arrangements such that events outside the control of policy which tend to weaken market demand for goods and services will themselves bring about events in the field of policy (such as reduction of government revenue or increase of government expenditure) tending to strengthen demand, while events outside the field of policy tending to strengthen demand will have inverse effects. The promising fields for such arrangements are unemployment compensation, pay-as-you-go taxes (and tax refunds), government expenditures in response to claims which will be increased by depression (of which there are examples in programs for veterans and for farmers), and various proposed automatic currency devices. Generally speaking such devices tend to exert pressure in the desired direction only when the economy is fairly far out of balance; thus they tend to mitigate the effects of disturbances, rather than to forestall them or roll them back. The probability is that postwar economic disturbances will be powerful enough to generate substantial unemployment and perhaps substantial price-level increases, despite all such devices that can be installed.

Built-in flexibility simplifies the problem of locating responsibility for operating policy. On the whole, the operating decisions called for are more like those made by a bank teller in deciding whether to honor a check than like those made by a bank board of directors in deciding whether to seek to make a larger volume of loans. Built-in flexibility thus reduces the burden on central authorities, giving decentralization both of fact-finding and of operating decisions. Unfortunately, the impossibility of devising a built-in flexibility system adequate to control

[5] *Exception:* The flexibility called for to deal with rapid changes definitely forecast would have much in common with that called for to meet unexpected changes. But policy proposals based on single-valued forecasts rarely provide more than rudimentary flexibility.

likely fluctuations makes it impossible to carry this decentralization to the point of obviating policy decisions at the center in administering a stabilization policy; and this creates problems of discretionary power.

It does not follow, however, that whatever cannot be taken care of automatically through built-in flexibility must be handled by executive discretion. Four degrees of discretionary power may be recognized. At the minimum, officials at the administrative center may be called upon to follow mandatory rules embodied in a formula (such as the variation of social security contributions according to the level of unemployment proposed for Britain in the White Paper on Employment Policy[6]). At the next degree, Congress may legislate from time to time within a framework announced in advance in a general policy declaration (as it appropriates for the reserve of the Old Age fund). At the next degree, Congress may act ***ad hoc.*** At the extreme of discretionary authority, administrative officials may act as they see fit within broad instructions (as is normal in the fields of public debt management, credit and labor policy, and to a less degree in public works).

In designing flexible policies, it is essential to keep flexibility itself from creating economic instability via uncertainty. Some uncertainty about policy is inevitable if policy is flexible; this may be reduced to secondary proportions, however, by maximizing the area of announced rules of policy. The existence of a flexible policy, furthermore, reduces uncertainties about market development. Fortunately the areas where certainty about policy is of key importance for business decisions (such as rates of business taxes) do not overlap much with those in which flexibility promises to be useful; the chief area of conflict is "heavy" public works.

Both stabilization machinery and operating policy need to be designed with an eye to uncertainty and consequent needs for flexibility. Maximizing build-in flexibility and preparing for adaptation of policy call for very different policy machinery than would be needed if certainty of the future made them unnecessary. Provision for changing direction calls for formalization of machinery to keep track of current events and translate them into evidence on the need either of a change in direction or of an overhauling of machinery. This implies standards which are specific enough so that surprises (agreeable as well as disagreeable) will be recognized when they happen. In operating policy, caution is called for in taking steps which may prove to be irreversible. Differences of degree in the range of contingencies viewed as reasonably likely, and in the rapidity with which squalls are thought likely to come up, become differences of kind when translated into needs for machinery.

In the face of real uncertainties, it would be irresponsible to interpret

[6] Cmd. 6527, May, 1944.

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the full employment problem in terms which imply that it becomes foolproof if some one contingency is provided against—whether that contingency is presented as chronic stagnation or as the danger that there will come to be more than vestigial traces of economic planning in the government. This brand of definiteness, in the event, would prove to enhance uncertainty by forcing government and business into a series of improvisations to meet contingencies not contemplated in advance.

III. *Launching versus Continuing Economic Stabilization*

In economic stabilization the first years will be the hardest, and the problem should be thought of in terms of launching stabilization in the face of unsettled economic conditions and public skepticism rather than in terms of running it after it is well established. Arguments which assume (as does much of the discussion centering around the Beveridge Report) that the problem of stabilization is one of running an economy which has a tradition of successful high-level operation can become relevant only after several years of favorable experience. On the other hand, discussions of transition from war to peace, insofar as they are concrete enough to offer much guidance for policy, run such a short distance into the future that transition policy can scarcely be expected to peel off more than the first layer of the problems of establishing economic stabilization.

The real problem of economic stabilization is one of "first catch your hare," and falls between the transition problems as generally conceived and the long-period problems as conceived by Beveridge. Policy must be prepared to cope with upsetting reverberations from past fluctuations—particularly from the war. While they are being worked off, backlogs of demand are likely to exert a good deal of inflationary pressure, which may end fairly suddenly. The age distributions of houses, automobiles, and clothing (and one should add, of marriages) will show marked abnormal bulges for some time—indicating not merely slackening of demand after backlogs are worked off, but also some rather sudden expansions of demand later.[7] Experience is likely to produce large and rather sudden changes in the demand for cash balances and in private estimates of investment opportunity.

How to forecast under postwar conditions—in particular how to estimate the effect of policy measures—must be learned by a feeling-out process. We may expect the problem to change as the public's experience with individual policy measures, and with the stabilization program in general, alters its reactions.

Policy must be adequate to operate not only without complete public

[7] *Illustration:* If the stock of automobiles reaches a "normal" level—relative to postwar income levels—in 1948, maintaining that level plus a trend factor is likely to call for more production in 1952–54 than in 1949–50.

confidence but in the face of definite skepticism. Until confidence is established, by experience, in the stability of prices, business volume, and labor relations, the key sector of inventories will be "jumpy." Large segments of public opinion (including a large share of the opinion which sways private investment) believe general recessions of activity to be inevitable, and will be ready to run for cover in case of a stock-market decline, an uncongenial political turn, or a temporary setback tracing to inventories or to a policy error. Foreign confidence in the stability of the United States is very weak. While there is a good deal of unreasoning confidence in the stability of retail prices, this may be broken down if substantial inflation is allowed during the transition. In general, public opinion can be converted from a destabilizing into a stabilizing factor only by initial successes of stabilization (or by a run of good luck).

All these difficulties may be considerably enhanced by a false start on economic stabilization. There seems to be serious danger of an attempt to get through the transition period without a stabilization policy, which makes serious fluctuations likely. In the process of agitating for a stabilization program, the natural political tendency is for its sponsors to claim too much for a relatively painless sort of program, whose adequacy to cope with reasonably probable contingencies cannot be guaranteed—as witness the widespread tendency to claim too much for public works. Serious fluctuations in employment and prices (particularly if the public has just been promised immunity from them) will accentuate and prolong the problems of launching stabilization.

Even a minimum stabilization program is apt to make rather stiff requirements upon the political process, particularly during the period of launching. Most of the measures involved run counter to some important group interest (or at least to habits of thought built up around group interests). Undoubtedly this fact will delay acceptance of many key measures. In consequence we must expect to see a stabilization program operating in the critical early years with an incomplete set of tools, and in many fields with second-choice measures as tools—compounding the economic difficulties.

Quite possibly an adequate degree of policy co-ordination will prove to require considerable changes in the traditional separation of powers among the branches of the federal government. Given a strong enough will to carry out a stabilization program, the existing structure of government could serve. But the splintering of responsibility and public attention this structure involves, and the temptations for politicians and interest groups to enhance the splintering, would seriously handicap the continuance of stabilization operations.

IV. *Instrumentalities and Operating Standards*

The problem of general economic stabilization for the United States

(subsuming the problem of full employment) strikes me as one of well-timed monetary-fiscal policy plus in case of need some combination of policies designed to obviate a conflict of price and employment objectives.

Some sort of long-run policy is called for to carry on the function fulfilled by wartime price control of modifying inflationary tendencies implicit in established price-making processes. Otherwise a monetary-fiscal policy committed to strengthening market demand whenever unemployment becomes serious will be in danger of generating inflation; whereas a monetary-fiscal policy committed to anti-inflationary action whenever prices rise appreciably will be in danger of generating unemployment.

The dilemma[8] hinges chiefly on the danger of inflation *with driving power from the cost side.* Under existing and widely accepted practices, unions are likely to drive up wages whenever employment is reasonably good; Congress is likely to drive up farm prices whenever wages and industrial prices rise; and business is likely to maintain its markups when wages and farm prices rise. These practices, developed in good part as responses to depression, have never been tested at their present pitch of intensity in a prosperous economy without wartime controls.

Unemployment is a poor remedy for the inflationary tendencies likely to result. Unemployment of 12 million would doubtless stop them in their tracks; but the difference between unemployment of 2 and of 6 million (let alone a difference between, say, 2 and $2\frac{1}{2}$ million) might well prove imperceptible. On the other hand, with such practices inflation may prove a poor remedy for unemployment. Inflation always indicates some leakage of the forces working to raise employment; and if the pace of inflation is fast enough to attract general attention these leakages can well become institutionalized (via farm parity adjustments, sliding-scale wage settlements, corrections to cost accounting, etc.). Economists who put faith in rising prices to solve the dilemma seem to rest their hopes on keeping inflation unnoticed—which means either having very little of it, or else deceiving organized labor, farm groups, etc., as to what is happening.

A different form of the dilemma could be created by setting up unattainable employment standards (to give extreme examples, attainment of civilian employment of 65 million or reduction of unemployment below $\frac{1}{4}$ million), short of which monetary-fiscal policy is committed to strengthen markets regardless of price consequences. Against this type

[8] The dilemma was summed up in verse as follows, at a small meeting on transition policy, by Kenneth Boulding:

"Divergent policies we seek
For markets strong and markets weak—
Hoping we can avoid this crisis:
Too weak for jobs, too strong for prices!"

of inflation (whose driving power would be from the demand side), acceptance of moderate unemployment is a protection.

Anything that can be done to make the pricing process function as competitive pricing is supposed to will help forestall the dilemma. Failing adequate measures along these lines, monetary-fiscal stabilization programs involve an inflation risk; but we cannot afford to defer monetary-fiscal action till this problem is solved.

The gong and the whistle. For the present, as I see it, monetary-fiscal policy should proceed on the plan of taking action to strengthen aggregate demand whenever the expansion of unemployment beyond a stated moderate figure sets off a gong, and taking action to contract demand whenever the rapidity of rise of some price index (in excess of a stated moderate rate of rise) blows a whistle. The dilemma arises if the whistle sounds while the gong is ringing, which is plainly possible. In this case a policy so designed will face an emergency.

There are several reasons to hope, however, that both signals will not be heard at once and such an emergency will not occur. During the early part of the transition, when the dilemma might well be at its most acute, continued price control can limit inflation and absolve monetary-fiscal policy of part of its responsibility for price developments (the whistle can be temporarily disconnected). After price control ends, the procedures by which the cost-spiral functions may prove to work slowly enough so that strong markets will generate only a very gradual price rise. Even a brief experience with adequate markets may relax barriers to higher productivity and make desired increases in wages, farm prices, etc., more nearly compatible with price-level stability.

The "economic disarmament agreement" it would take to get less inflationary pricing processes would have a better chance of acceptance if negotiations need not be opened until after experience had demonstrated both that adequacy of markets could be maintained and that the benefits of adequate markets were being frittered away by existing pricing processes. It would be comforting, however, to be sure that as economists we had a good practical counsel in reserve for handling the dilemma. We may hope for some of this sort of comfort from Professor Slichter's paper.

The transition: monetary-fiscal policy cum price control. In the transition period (which I see as a rather complex hedging operation), monetary-fiscal policy calls for reinforcement from price control. Against the danger of bogging down short of full employment, the chief safeguard is to make sure that demand for goods and services exceeds supply until full employment is approximately reached. The inflationary pressure from the winding up of the government's war expenditures and from private backlogs of demand and high liquidity is likely to

bring the desired excess of demand; if not, monetary-fiscal policy should stand ready to reinforce demand.

There is a separate problem of stimulating supply—which may prove to have either inflationary or counter-inflationary effects, though the latter are more likely insofar as expansion of supply is achieved through increasing output per man-hour worked and thus making wage increases less inflationary.

Against the danger of inflation (intensified by the forced-draft policy suggested above), price control is the natural safeguard for the first part of the transition. But since general price control cannot (and in the view probably of most economists should not) be permanent, monetary-fiscal policy must be ready to take over the responsibility of inflation control by, say, early 1947. Against the danger of deflation after full employment is reached our main reliances are forestalling collapse by inflation control on the upswing and such measures as tax cuts, expanded public works, and appropriate steps in the fields of money and public debt management once a downswing starts. Such steps need to be planned soon but held in suspense.

Launching stabilization: after the transition. In the period of launching stabilization, beyond the immediate transition period, monetary-fiscal policy will also have heavy responsibilities, and without the backing of war-type price control. As indicated above, there will be rapid shifts in the direction and intensity of "spontaneous" economic forces.

It is very probable that the liquidity of the public's postwar position will prove our number-one economic problem; if so, the difficulty will lie precisely in the field where most can be hoped for from monetary-fiscal policy. Clearly the avoidance of major blunders in monetary policy (such as continuance of the present total lack of means for arresting the creation of credit by banks) is of the first importance; I urge also that the positive possibilities of monetary policy should not be sold short.

In case the gong and the whistle sound simultaneously, we shall have to face the problem of designing some restraint on private pricing practices which is adequate, permanently workable, and reconcilable with basic freedom of the market—a hard set of specifications to fill.

In studying possible instruments of policy, as in forecasting possible future developments, our object should not be to arrive at a single valued answer, but to make sure that major possibilities have not been overlooked. A minimum rather than a maximum of economic control should presumably be our objective; but the minimum in the monetary-fiscal field with which we could be confident of economic stabilization probably lies so far beyond the degree of control for which machinery is now in sight that we cannot afford to overlook any promising possibility.

FISCAL AND MONETARY POLICY

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I. *Objective of Fiscal and Monetary Policy*

Fiscal and monetary policy cannot be divorced from the basic economic conditions of the period under consideration. To assume that it can be is the mistake of the budget balancers. Balancing the budget makes sense when there is danger that aggregate demand will exceed aggregate supply, but only then. Throughout most of the nineteenth century private spending was adequate to provide a market for a reasonably high level of output and much of the time even to exert a mildly inflationary pressure. Government deficits would have increased demand still further without significantly adding to supply and would thus have served no useful purpose.

Nineteenth century social and political attitudes being what they were, the objective of fiscal policy was not only a balanced budget but also a budget balanced on the lowest possible level. For the welfare of the community as a whole the level was undoubtedly too low. But even though somewhat larger expenditures would have been desirable, a balanced budget would still have been, generally speaking, a sensible objective.

The same applies to monetary policy. There are no universally valid criteria. In the nineteenth century conditions were such as to call for a cautious policy. Private investment was highly responsive to changes in interest rates and in periods of prosperity might easily have become excessive had rates been held at low levels.

The danger is that criteria appropriate to one set of conditions will be blindly carried over into another period in which conditions have radically changed. In the thirties balancing the budget was still accepted by the great majority of the public, Congress, and the Administration as a self-evident goal of fiscal policy, even though the conditions which make balancing the budget advisable had entirely disappeared. Similarly, we hear it said on every side today that "we can and must balance the budget" as soon as normal peacetime conditions have been restored. There is rarely any attempt to say why. A balanced budget has come to be regarded as an end in itself. We have perhaps made more progress with respect to monetary policy. But even here there is still a tendency to characterize the easy money policy of the thirties as "artificial," implying that some other policy would have been more "natural" and thus to be preferred. Actually there is no such thing as a natural or correct monetary policy independent of the conditions of the time.

With the relatively low investment demand of the thirties anything but an easy monetary policy would have been not only artificial but suicidal.

Before we can hope to formulate an intelligent fiscal and monetary policy for the future we must thus inquire as to what kind of an economic world we are likely to be living in.

The immediate future will be dominated by the process of transition from war to peace. This process will be characterized by (1) heavy restocking and reconversion demand on the part of both consumers and business—a demand which derives a considerable measure of independence from the large accumulation of liquid assets during the war; (2) a continued large volume of government spending for war-related purposes; (3) initial supply difficulties in war-affected industries, particularly construction, followed by an at first gradual and then increasingly rapid rise in output.[1]

As Dr. Hart has pointed out, the transition period is likely to contain the threat of both inflation and deflation. In construction, durable consumer goods, and other lines where there are obstacles to rapid expansion of output, demand is likely to exceed supply, with consequent upward pressure on prices. On the other hand, we must be prepared for the possibility that over-all demand will not be sufficient to sustain output in industries where supply can readily be expanded. Thus we may be fighting on two fronts and, unless we are careful in mapping our strategy of defense, find ourselves exposed to annihilation from the one while we are rushing out to meet an attack from the other.

Neither monetary nor fiscal policy is adapted to meet the threat of inflation in a mixed situation of this kind. Both are general, nondiscriminating instruments—under other conditions and for other purposes this is precisely their virtue. An attempt to use either (or both) to curb inflationary tendencies in, say, construction would merely cause a shrinkage in over-all dmand without doing anything to increase the supply of construction materials or labor. They are a little better suited to halt a general deflationary tendency but even here must be used with discrimination and care. The launching of a large-scale public works program within the next few months, for instance, would do more harm than good. It would compete with industrial and residential construction for scarce materials, labor, and organization and would thus intensify rather than alleviate the difficulties in this key sector. This does not mean, of course, that there should be no expansion of public works activity in the near future. Many pressing jobs have been postponed during the war and should be taken up as soon as possible. But the

[1] S. M. Livingston, *Survey of Current Business*, Nov., 1945.

governing factors should be the immediate need and the availability of labor and materials rather than the stimulation of demand and employment in general.

In contrast to fiscal and monetary policy, price control and priorities have the virtue of being selective. They can be used to curb inflationary tendencies where needed without unfavorable repercussions elsewhere. I quite agree with Dr. Hart that they should be our main reliance in dealing with the threat of inflation until supply can catch up with demand in the reconversion sectors of the economy.

The prospect seems to be at least reasonably good that over-all demand will be adequate for the next year or two without any special contribution—i.e., more than is implicit in present policies—from the government. If it is not, tax reduction is probably the best method of increasing demand without aggravating difficulties of supply. The reduction should be accomplished chiefly through increase in personal income tax exemptions and reduction of the "basic"[2] rate and also of excise taxes. This would increase disposable income in the hands of those who are most likely to spend it on goods and services. Increase in social security benefits would also increase consumer spending without impeding the expansion of supply in construction and other problem areas. Both tax reduction and increase of social security benefits are, moreover, essential parts of a long-run program for insuring reasonably full employment. The chief problem for the transition is the timing.

II. *The Long-run Problem*

While difficulties of supply loom large at the present moment, our long-run problem is almost certain to be one of demand rather than supply. Once the process of reconversion and readjustment is finished, the country's tremendous productive capacity will again make itself felt. The statistical experts estimate that with reasonably full employment we will produce a volume of goods and services by the end of this decade at least 50 per cent greater than was actually produced in 1940. The increase is accounted for by the (1) assumed elimination of abnormal unemployment, (2) growth of the labor force, and (3) increase in man-hour productivity. There are, of course, minor differences of opinion: about the amount of unemployment that should be considered normal, the number of abnormal war entries who will withdraw from the labor market, and the probable rate of increase in man-hour productivity. But the differences are relatively unimportant. The broad conclusion which emerges is remarkably clear. It is strongly reinforced, moreover, by the actual record of production in the war.

If people invariably spent all the income they received, either on

[2] Normal plus first bracket surtax.

consumption goods or on new capital goods, supply would create its own demand and the only problem would be to get production going at a high enough rate to provide full employment. We know only too well, however, that the problem is not so simple. With our deeply ingrained spending and saving habits, a high level of output actually creates difficulties for itself by encouraging a large volume of saving. This in turn necessitates a high rate of new capital formation, which may not be forthcoming except under especially favorable conditions.

Merely because conditions were favorable to a high rate of investment, relative to saving, for a hundred years or more up to the first World War many people assume that this is the "natural" state of affairs and may be expected to continue indefinitely into the future. Actually, the high rate of investment was in large part a result of the extraordinarily rapid expansion of the Western economy in both territory and population.[3] This expansion, needless to say, has already slowed down to a significant extent.

On the other hand, there is as yet no sign—at least in this country—of a corresponding reduction in the community's disposition to save. (Its ability to save continues to increase, of course, with the rise in real income.) As far as we can judge on the basis of income and consumption statistics, the propensity to save was fully as high in the thirties as it had been before. This is particularly impressive in view of the presence of certain factors in the thirties which might be expected to reduce the propensity to save: higher income and inheritance taxes, low interest rates, higher wage rates, and a larger proportion of old people in the population.[4]

Current estimates of the future volume of saving are based either on a projection of the prewar regression line to the higher levels of income that would exist with full employment, or on the use of the ratio of saving to income which prevailed in past periods of prosperity. The first method gives a figure which is probably too high, since it assumes that the increase in saving accompanying recovery from depression will con-

[3] Although many writers prefer to ignore the importance of population and territorial growth for investment, few attempt openly to deny it. Even Dr. George Terborgh who has devoted a whole book to the *Bogey of Economic Maturity*, admits that "an economy with a rapid expanding population should have, other things equal, a higher rate of capital formation." (P. 46.) Regarding territorial expansion he says: "Paradoxical as it may seem, capital formation per thousand settlers in the frontier zone could have been throughout the entire progress of western settlement *less* than capital formation per thousand of increment in the population of older areas during the same period, and not withstanding this the western movement could have *increased* capital formation for the country as a whole. This is because the overflow of population into the frontier prevented the crowding of natural resources in the older regions and thus permitted a more rapid advance in per capita production and capital formation in those regions than would have occurred had all the increase in population piled up within their limits." (P. 70.)

[4] Terborgh relies heavily on the dissaving of the increasingly large proportion of old people in the population to offset the unfavorable effect of demographic maturity on investment. He gives no indication, however, of the quantitative importance of this factor.

tinue into a period of stable prosperity. As several writers have pointed out there is some reason to think—on the basis of rather sketchy historical data—that consumption tends to grow up to the increase in real income, at least, to the extent of restoring its past ratio to income.[5] Use of this method probably yields a conservative estimate of the amount of saving we will have to deal with over the next decade or so in view of the large amount of "growing up" consumption will have to do and the apparently slow operation of forces tending to raise the propensity to consume. The range in the estimates of saving yielded by these two methods is roughly from 11 per cent to 15 per cent of national income; or, in absolute amounts, from 19 to 27 billion dollars,[6] with a full employment gross national product of 200 billions and moderate tax rates.

While the historical evidence points to a high degree of stability in the relation of consumption to income,[7] we clearly need to know much more than we do about the possible effect of such factors as changes in the relation of wages to profits, changes in the structure and level of taxes, low interest rates, and trends in dissaving.

The question of wages and profits is particularly important. There is a tendency at the present time to treat changes in wage rates as equivalent to changes in purchasing power. If wage rates are increased 20 per cent, pay rolls go up 20 per cent, it is argued, and then there is that much more purchasing power. This is clearly too simple: wages are costs as well as income. An increase means either higher prices or smaller profits or the more rapid introduction of laborsaving techniques. If prices go up or workers are displaced, the effect of the higher wages on purchasing power is nullified. It is only if the wage increase comes out of profits that there is a real increase in workers' incomes and an expanded market for the things they buy. But this raises further questions: How far can profits be reduced without unfavorable effects on production, either directly, or indirectly through the discouragement of investment? Can collective bargaining be relied on to reduce profits to the extent that is desirable, i.e., compatible, with high level production, or is some sort of public control necessary?

At a high volume of output business can afford to operate on a smaller margin of profit than at a low or fluctuating volume. Thus the degree of success we have in stabilizing activity on a high level will itself be a factor influencing the relation of wages to profits and hence the propensity to consume.

In what follows I assume, for want of anything better, that there will

[5] Cf. A. G. Hart, "'Model-Building' and Fiscal Policy," *American Economic Review*, Sept., 1945, pp. 535–536.

[6] Cf. Jacob Mosak's paper, "Forecasting Postwar Demands," *Econometrica*, Jan., 1945.

[7] At least for this country. In the case of England there seems to have been a marked change after the first World War.

be no revolutionary changes in the wage-profit relation and that the effect of such changes as do occur will fall within the limits already suggested for the consumption-income ratio.

What prospect is there that private investment will be large enough to fill the probable gap of 20 billion dollars or more between consumption and income which we must expect on a high level of income? Expenditures for replacement and improvement may be expected to grow with the volume of output. But they will be more than taken care of by depreciation and obsolescence allowances. Net investment depends chiefly on the growth of population and resources and on the appearance of new, heavy capital-using industries. In view of the slowing down in the growth factor, it seems likely that net investment will be considerably smaller in relation to income than in past periods of prosperity. We may, in fact, have to revise our idea that investment in the thirties was so abnormally low. In spite of the "low" volume of investment, there was evidently a considerable increase in productivity, as shown by the speed and ease with which production was expanded to meet war demands.[8]

I am inclined to think that investment in the next decade or so will probably be higher relative to income than it was in the thirties, though not as high as in earlier periods of prosperity. The optimistic factors seem to me to be, first, the probable development of some new industries of the heavy capital-using type. Air transportation immediately comes to mind, although its impact is unlikely to compare with that of the automobile in the twenties. The second factor is foreign investment: China, South America, and perhaps other parts of the world will want American capital for developmental purposes. But it would be easy to exaggerate the rate at which such development can safely take place. Moreover, it would be very dangerous if we were to *depend* on foreign investment as an essential prop to our own prosperity. In the interest of world economic and political stability we must be prepared to maintain domestic prosperity without any help from investment abroad. Housing is the third factor: This is perhaps the most important and potentially fruitful field for expansion in the next ten to twenty years. But with the reduced pressure of population growth, expansion will not come by itself as it used to. It will require much more encouragement and co-operation from government. Measures, voluntary or otherwise, to keep costs and prices from choking off demand; further reduction of mortgage rates; government aid in planning urban redevelopment and in undertaking projects itself for the lowest income groups—all will be necessary. Assuming vigorous action along all these lines, residential

[8] Alvin H. Hansen, "Stability and Expansion," *Financing American Prosperity* (New York: Twentieth Century Fund, 1945), p. 223.

construction might reach 5 to 6 billion dollars a year in the fifties.[9]

All told, I think we will be lucky if net private investment averages 10 to 15 billion dollars a year in the post-transition period. This means that a net government contribution of 5 to 10 billions will probably be necessary to keep income and employment at reasonably high levels.

IV. *The Federal Budget*

How large the government's contribution to income must be depends, among other things, on the level of government expenditures and receipts itself. It would be possible, theoretically, to balance the budget and maintain full employment, whatever the community's propensity to consume and the state of investment demand, by increasing both taxes and expenditure sufficiently. Higher taxes reduce the amount of income available for both consumption and saving, and if they were high enough would presumably cut saving to whatever extent might be required to bring it into balance with private investment. If the potential gap between saving and investment were not very large this would be a feasible, though not necessarily the most desirable, way of solving the full employment problem. But if the gap is as large as seems probable for the United States in the next ten to twenty years it would be quite impractical. Many savers would probably resist drastic reduction in their saving by cutting consumption, and very high taxes would probably have an unfavorable effect on investment. Thus fantastically large receipts and expenditures might be necessary to bring about a balance at a full employment level of income. As Professor Haberler points out, budget balancing could be far more dangerous, from a strictly conservative point of view, than deficit financing.[10]

At the other extreme, expenditures might be kept at a relatively low level and taxes entirely eliminated. The deficit would have to be considerably larger in this case than if an intermediate level of taxes and expenditure were chosen, since a large part of the benefit of the tax abolition would—with a tax system like ours—go to those with a relatively high propensity to save. Since a large deficit is not particularly desirable for its own sake, this alternative could be justified only if it were impossible to increase expenditure, or if the increase would be of such slight benefit to the community as to be outweighed by the benefits of the tax reduction.

In order to formulate a fiscal policy for maintaining full employment it is necessary to have at least a rough idea of (1) the desirable, and

[9] Robinson Newcomb, "Can the Construction Industry Carry its Immediate Share of Postwar Employment?" *Review of Economic Statistics*, Aug., 1945.

[10] "Five Views on the Murray Full Employment Bill," *Review of Economic Statistics*, Aug., 1945, p. 108.

possible, magnitude of federal expenditure[11] and (2) the probable yield of various levels of tax rates.

As to expenditure, the war has, fortunately, left us with a sizable legacy of "inevitable" spending about which no one is seriously inclined to argue. It is commonly estimated that interest on the debt and military and veterans outlays will amount to at least 12 billion dollars a year over the next decade or so. This gives us a fairly good cushion of expenditure to fall back on. Without it I am afraid the problem of maintaining full employment would be insoluble. Even with it the solution may not be easy.

If we allow for about the same degree of "extravagance" in federal spending as in the late thirties, total federal outlay, excluding social security—which it is convenient to treat separately—would be approximately 17 to 18 billion dollars.[12] Considering the increase in war-related expenditures this figure may seem unduly low. But it must be remembered that we are considering the problem of maintaining full employment and, with full employment, work relief spending, which constituted roughly one-quarter of the immediate prewar total, would disappear. One of the weaknesses of fiscal policy in the thirties was, in fact, its reliance on work relief as a channel for contributing to income. Work relief is effective in stopping a decline, as was demonstrated in 1938, but it is unsuited by its very nature to supporting income and employment on a high level. If fiscal policy is to be used in the future to maintain full employment and not merely to check a decline when unemployment has already become severe, it will be necessary to find permanent, nonrelief channels for the government's contribution to income.

But would not 17 to 18 billion be enough? Why not obtain whatever deficit is necessary by cutting taxes rather than increasing expenditure above this amount? The answer, it seems to me, is twofold.

First, and most important, we need a considerably larger volume of expenditure for the direct benefits it will yield to the community. There was a great deal of discussion before the war of the need for more spending on health, education, housing, social security, and the conservation and development of natural resources. But, aside from the emergency work of the WPA, relatively little progress was made in developing programs to meet the needs in these fields. Opposition to increasing government activity in promoting community welfare was still too strong. There are limits, of course, to the amount the government can

[11] For simplicity, I assume that state and local budgets will be balanced in the neighborhood of $10 billion. Any deficit they might incur would correspondingly reduce the necessary federal contribution.

[12] This is a very rough estimate arrived at by adjusting 1939 expenditures for the increase in interest, military, and veterans expenditure and for the higher price and salary level assumed in the $200 billion gross national product estimate, on which other calculations are based, and for the disappearance of work relief with the achievement of full employment.

spend with benefit to the community. I doubt if it would be possible to justify an increase of as much as 20 billion dollars over the "adjusted prewar" level of 17 to 18 billions, let alone the increase that would be necessary to balance the budget at full employment. But I do think that several billions more a year spent on health, education, slum clearance, etc. would yield far more in terms of welfare to the whole community than an equal, or greater, amount of tax reduction. Professor Hansen has recently suggested 24 to 25 billion dollars, excluding social security, as a desirable goal of federal expenditure.[13] Adjusted to comparability with a 200 billion dollar gross national product, this would be roughly 27 to 28 billions.

The second reason for preferring increased spending to tax reduction is that the tax rates necessary to balance a 17 to 18 billion dollar budget would, at a high level of income, be relatively low and the benefits of tax reduction correspondingly small. A combination of 1940 corporate and individual income tax rates with excise taxes 50 per cent below their present level would probably yield 18 billion dollars or more at a gross national product of 200 billion dollars.[14] A reduction in either individual or corporate income tax rates below the 1940 level would be hard to justify in terms of its contribution to community welfare as compared with increased spending on health, education, housing, etc. It would also increase saving considerably and thus necessitate a larger deficit, which would be undesirable on psychological and political grounds, if on no other.

In addition to the regular budget, the fiscal aspects of social security must be considered. If both benefit and contribution rates are kept at their present levels, the old age and unemployment insurance system will probably yield a surplus of a billion dollars or so by 1949. An increase in the old age contribution rate to 2 per cent each for employers and employees would double that amount.[15] Expansion of the social security system to include health and permanent disability insurance and to cover as many as possible of the groups who are now excluded from its protection is urgently needed. But although such expansion would be a great step forward from the point of view of providing adequate security, it would do little to help solve the fiscal problem if, as seems likely, contributions were increased along with benefits. About

[13] *Financing American Prosperity*, p. 214.

[14] Mosak estimates that federal revenue would be $22.5 billion at a $200 billion gross national product with 1940 corporation and individual income tax rates and other taxes at present levels. From this figure we may subtract at least $3 billion for reduction in excise taxes. Mosak's corporation profit total may also be somewhat too high. Allowance for both these factors would reduce the total revenue figure to $18 to $19 billion. Using 1941, instead of 1940, individual income tax rates would add roughly $4 billion for a total of $22 to $23 billion. *Op. cit.*, p. 34.

[15] Kimmel, *Postwar Fiscal Requirements* (Brookings Institution, 1945), pp. 142–152.

the best we can hope for in the next five years or so is that present benefits will be liberalized somewhat and that the old age contribution rate will be kept where it is now. This would at least reduce the surplus and hasten the day when the system will begin to run a deficit; i.e., begin to make a positive contribution to incomes. But the opposition to using the social security system as an instrument of fiscal policy is very strong and we may have to reckon with a surplus for some time to come.

By way of summary, it seems to me certain general propositions can be laid down about a full employment budget in the post-transition period:

1. To maintain full employment we will have to have relatively high expenditure—in terms of current thinking—combined with moderate, or low, tax rates.

2. There is more danger that spending will be too small than too large. Total federal expenditures of 25 billion dollars or more would be desirable for the direct benefits to the community as well as the indirect effect on income. But it may be difficult to obtain that much peacetime spending. There will undoubtedly be stiff opposition to increased spending on health, education, housing, and other items important for the promotion of community welfare.

3. Spending programs should be flexible wherever possible without serious detriment to the objectives of the programs. In the case of public health or aid to education it would clearly be undesirable to vary the rate of spending with changing fiscal requirements. The same is undoubtedly true of many other expenditures. But there are still others (e.g., most of the traditional public works programs, conservation and regional development projects, low-cost housing) which could be planned on a long-range basis and accelerated or retarded according to need.

4. The level of taxes, and particularly income taxes, will have to depend on (a) the size of the required government contribution, (b) the volume of spending, (c) the impact of social security, and (d) the possibility of reforming the tax system itself. I am inclined to be mildly pessimistic on all these counts and thus to think that it may be necessary to reduce income tax rates to the 1940 level or lower. But this is a presentiment, not a recommendation. I would rather see income taxes at a somewhat higher level—particularly surtax and corporate rates—accompanied by increased spending, further reduction of excise taxes, and the elimination of the social security surplus. In the case of income taxes the possibility of affording relief partly through extension of the privilege of averaging good years with bad (to individuals as well as corporations) should be explored.

5. It is important to distinguish between the problem of adjusting

taxes to secure an adequate normal level of government contribution and the further problem of coping with fluctuations around that level. In dealing with fluctuations, it seems to me that the basic individual income tax rate or social security contribution rates are the appropriate instruments to use. Surtax rates, corporate taxes, and excise taxes should not be changed with short-run fluctuations in demand.

6. Two other ways of contributing to income would enjoy high priority if they were practical: (a) financing a social security deficit and (b) making grants to the states and localities to enable them to reduce consumption and real estate taxes. But I suspect both of these belong to the category of longer-run projects. Eventually, the social security system will begin to run a deficit and eventually some reform of our over-all tax system may be possible. Eventually we are also likely to need both very badly, as housing, foreign investment, military outlays (we hope), and the construction activities of the government itself —assuming these all reach hoped-for levels in the next decade or so— taper off. In the meanwhile any success we might have in either of these directions would be a desirable substitute for a corresponding amount of income tax reduction.

V. *Flexibility and Forecasting*

Throughout this discussion I have assumed that it is meaningful to distinguish between the problem of insuring a generally adequate level of demand and the problem of coping with fluctuations. The difference can be illustrated by comparison of the pre-World War I period with the decade after 1929. Both were characterized by fluctuations of income, production, and employment. But the general level about which the fluctuations took place was quite different. In the earlier period the level was on the whole pretty satisfactory; the main problem was to iron out the fluctuations. In the latter period, on the other hand, the fluctuations had become secondary and the problem of securing an adequate general level had moved into the center of the stage.

Although I am fairly optimistic about private investment in the next decade or two as compared with the thirties, I think it will nonetheless continuously fall short of the amount necessary to maintain full employment—in the absence of positive governmental policy—by a wide margin. At the same time I see no reason for thinking that fluctuations in investment will be more violent than they were, say, in the late nineteenth century.[16] I am thus inclined to think that our *primary* concern

[16] In the important case of housing, it seems likely that either (1) the industry, labor, and government will be able to work out together some way of keeping costs low relative to incomes and thus tapping new strata of demand, in which case there will be a fairly large volume of construction over the decade of the fifties, or (2) costs will remain high and construction be limited to the much smaller demand generated by population increase alone. There is little likelihood of fluctuation back and forth from one of these levels to the other.

in the post-transition period will again be with the general level rather than with fluctuations of demand.

But even though it may not be our most urgent problem, offsetting fluctuations in demand will still be very important. For complete success, i.e., for the maintenance of completely stable production and employment, we would have to have not only a great deal of flexibility in fiscal policy but also a degree of accuracy in forecasting private demand which may be unattainable for a long time to come. Is it likely, for instance, that our forecasters would have been able to call the turn in 1929 or 1937 with sufficient precision to make it possible to forestall completely, through an increase in spending or reduction in tax rates, the decline in aggregate demand and employment? And how many other turns would they have called which never materialized?

The goal of complete stability, however, is probably overambitious. We will avoid the really serious evils of instability if we are able to check a decline, or an undue expansion, before it has gone very far. This is particularly true since there are certain automatic factors which can be relied on as a first line of defense. In the case of expansion there is a considerable amount of flexibility in the productive system itself. Output can be increased by working overtime, attracting new entrants into the labor force, utilizing excess capacity, working multiple shifts, etc. It is only as these possibilities become exhausted that the general danger of inflation becomes serious. And on the downside, unemployment insurance provides an extremely important cushion to absorb the initial shock of the decline and give time for the appropriate changes in fiscal policy to make themselves felt. It may be impossible in a future 1929 or 1937 to call the turn in time to prevent the decline's ever starting, but we should be able to reverse it by the time unemployment has reached, say, four to six million. The success with which fiscal policy reversed the downward trend of activity in 1938 is very encouraging in this connection.

I have already suggested that variation in the rate at which certain spending programs are carried out and also in the basic income tax rate be used as compensatory fiscal devices. In general, I am inclined to favor reliance on changes in spending, but there may well be situations in which both will be required to do the job.

A second line of attack on the problem of fluctuations would be through measures to stabilize private investment itself. I am not sure how far it would be possible to go in this direction without running up against the problem of government interference with private enterprise. But some sort of co-operative measures might be worked out which would be free of this objection. Control is particularly important in the

case of inventory expansion and it might even be a good idea to keep temporary price control in reserve as an emergency measure.

VI. *Monetary Policy*

If my assumptions about the basic characteristics of the post-transition period are correct, the chief function of monetary policy will be to keep interest rates low. There is very little likelihood that private investment by itself will be so large as to generate an excessive demand for goods and services and thus to call for restrictive monetary measures. Private investment and the government contribution together might be excessive but that would call for a reduction in government spending, not an increase in interest rates. The great need for low-cost housing in the next decade or two makes it particularly important to keep interest rates low and thus to find other means for curbing any general inflationary tendencies.

The primary purpose of an easy money policy is to encourage investment, or, at least, to avoid discouraging investment. With the slowing down in population growth and territorial expansion, investment is likely to be particularly vulnerable to higher interest rates. Raising rates would thus seriously aggravate the difficulty of keeping aggregate demand at a level which will insure reasonably full employment.

In the longer run, an easy money policy may also have some effect on the propensity to consume. There is no evidence that it did have any effect in the thirties, but this does not exclude the possibility that it might have if continued over a long enough period of time. Certainly, the speculative motive for holding cash balances is likely to become weaker as people become more accustomed to low interest rates. This would tend to drive interest rates still lower and at some point might discourage savers sufficiently to make them reduce their saving and increase their consumption. On the other hand, savers seem to be a stubborn lot and they may go right on saving even if they have to keep a sizable fraction of their savings in the form of increased cash balances. This is clearly a subject for continuing research in connection with the future development of fiscal policy.

Even if we are successful in forging the right kind of fiscal and monetary policy, the battle is no more than half won. As the first speaker has pointed out, the best fiscal policy in the world will not assure us stable, full employment unless we also have a reasonable degree of stability in the price and cost structure. What are the chances that such stability will come of itself once the readjustments of the transition from war to peace are completed? What kind of controls can we devise if it does not? These are questions which I am only too glad to turn over to the next speaker.

WAGE-PRICE POLICY AND EMPLOYMENT

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I

Wage policies are made by business enterprises, trade unions, and government. Time does not permit a thorough discussion of these several varieties of wage policies. During the last fifteen years the influence of unions and government upon wages has increased enormously. Consequently, this paper will be devoted in the main to examining the effect of union wage policies upon employment. This topic requires an examination of aspects of the employment problem which have been grievously neglected in modern employment theory. Proposals of public or private policies for dealing with the employment problem are outside the scope of this paper which has the limited but important purpose of providing a more realistic foundation for policy making. Throughout this paper the assumption is made that collective bargaining is sufficiently universal to determine directly or indirectly the behavior of wages among nonsupervisory and nontechnical employees.

II

Let us look briefly at the behavior of wages and prices during the period when union organization was confined to a few industries. The last century was a time of rapid technological progress. With unions on the whole quite weak, one might have expected that the adjustment of prices to rising productivity would take the form mainly of falling prices rather than rising wages. And yet this apparently did not happen. Between 1840 and 1930 the hourly earnings of nonagricultural workers rose sevenfold and the index of wholesale prices, instead of falling, rose over 20 per cent. I concede that the index of wholesale prices has a marked upward bias, and that the real movement of wholesale prices was undoubtedly downward during the period for which the index reports a rise.[1] Nevertheless, the very rapid rise in wages indicates that the adjustment of the wage-price structure to growing output per man-hour was accomplished mainly by advances in wages rather than decreases in prices. In other words, competition of employers to buy labor seems to have affected wages more than competition of employers to sell goods affected prices.

[1] The index of wholesale prices fails to reflect improvements in the quality of products. Furthermore, new products do not get included in the index until they have become fairly common. Consequently, they are excluded during the very years when most rapid progress is being made in improving their quality and in reducing their cost. No mere index of prices, of course, can satisfactorily reflect the gains of technological progress because the gains consist largely of new products.

III

Now that one out of three nonagricultural employees is a union member and that unions are stronger than ever, the upward pressure on wages will probably be far greater than in the nineteenth century. And yet there is a possibility that the upward pressure of unions on wages will be considerably less than one might expect. Little is known about the wage policies of unions, but substantial evidence supports the conclusion that the wage policy of many unions has consisted mainly of preserving a more or less customary differential above the wages of nonunion employees. As nonunion wages go up, the union seeks similar increases in the wages of its members. Nonunion wages have generally risen sooner in periods of revival than union wages, but over extended periods nonunion wages and union wages seem to have advanced at about the same rate.[2] Even where unions have been in rather complete control of an industry, as in the case of railroads or coal, they have made wage adjustments on the basis of wage changes in other industries.[3]

One can easily understand why the wage policy of unions might be to maintain a customary differential above nonunion wages. Preservation of the differential would satisfy the members that the union was worth belonging to; but an attempt to push union rates up faster than nonunion would quickly produce unemployment among the union members. Probably the large and strong unions which have grown up during the last few years will be unwilling to adopt the policy of basing their wage scales upon nonunion wages. The theoretical implications of the policy, however, are important. Once the differential between union and nonunion wages was established, the *movement* of union wages would be determined by the same forces which determine the movement of nonunion wages; namely, by changes in the demand for labor. In that event the influence of unions upon prices and employment would be considerably less than one might suspect. I am not predicting that unionism in the day of its great strength will pursue the same wage policies as in the days of its weakness, but I am calling your attention to the possibility that the upward pressure of unions on wages may be considerably less than most people (including me) anticipate.

[2] Douglas found that among factory workers "pay roll" hourly earnings increased 3.27 times between 1890 and 1926 and that the hourly earnings of union workers in manufacturing increased by substantially the same amount—3.11 times. "Pay roll" hourly earnings represent industries in which there were both nonunion and union workers, but mostly nonunion. P. H. Douglas, *Real Wages in the United States*, pp. 96–102. The union hourly earnings do not pertain to the same occupations and industries as do the pay roll data and the union data apply to more skilled workers than do the pay roll data. For these reasons the comparison leaves much to be desired.

[3] These observations are not intended to imply that wages in all union industries move upward at the same rate or that some union rates do not from time to time run ahead of rates in general or fall behind them.

IV

Let us explore the possibility that unions and government will subject wages to far more upward pressure than ever before. This seems to have happened after 1933. Between 1929 and 1939 hourly earnings of nonagricultural workers rose 17 per cent while the prices of finished goods dropped nearly 20 per cent. Real wages rose faster than in any decade since the seventies. The advance in wages was apparently too rapid for the demand for labor, because private pay rolls in 1939 were nearly 8 billion dollars less than in 1929.

Let us first examine the effect of collective bargaining upon the cyclical movement of employment. This will help us separate some superficial and short-run effects of changes in wage-price relationships from underlying long-run effects. The usual order has been for prices to rise, and the rise has been followed by an advance in the price of labor—though often at a slower increase than the advance in commodity prices. Union wages move up more slowly than nonunion. When business declines, prices drop. Wages may drop, too, but their decline comes later and is smaller than the drop in prices. Union wages drop later and less than nonunion. Sometimes union wages do not drop at all. J. M. Clark has expressed the opinion that "no conceivable behavior of prices and wages would in itself iron out those cyclical fluctuations of prosperity and depression which take place over ten years or less, particularly the cycles which last on the average about forty months in this country."[4] I suspect that Professor Clark is right. Nevertheless, a different timing of wage changes might substantially limit the fluctuations of production and employment.

The fact that the movement of business is cyclical means that for a wide variety of expenditures, particularly investment expenditures and expenditures for durable consumer goods, the economy is shifting between periods of catching up and periods of postponing expenditures. Part of the time, for example, investment opportunities are being exploited faster than they are being discovered; part of the time investment opportunities are accumulating faster than they are being exploited. Investment opportunities include, of course, changes in inventories as well as expenditures on plant and equipment. Part of the time consumers are buying goods faster than they wear out; part of the time goods are wearing out faster than they are replaced. Constant shifts in the investment function and constant changes in liquidity preference are characteristics of the economy.

How would a different behavior of cost-price relationships affect the amount of postponing and of catching up and thus the fluctuations in business? Changes in wages do two things. If not completely offset by

[4] *Financing American Prosperity*, p. 101.

changes in prices, they affect the propensity to save and also the number of investment opportunities which will yield a given return. For the sake of convenience, let us call these effects of changes in wage-price relationships upon the propensity to save and upon investment opportunities the "margin effect." The expression is not an altogether happy one, but it is brief. If wage changes arouse expectations of price changes or other changes in investment cost, they affect the timing of investment decisions. For convenience let us call the effect of changes in wages (or prices) upon the timing of expenditures "the timing effect." Price movements and expected price movements probably affect the timing of expenditures even more than do wage movements.

The effect of price movements and wage movements upon the cyclical movements of business is a mixture of timing effects and margin effects. Rising prices and wages have the best chance to produce timing effects early in periods of revival when the accumulation of unexploited investment opportunities is largest. As the revival proceeds and as the backlog of unexploited investment opportunities is diminished, rising prices and wages may produce anticipatory buying. Although the rise in wages produces timing effects upon expenditures, the fact that wages lag behind prices undoubtedly limits the timing effects of price increases. On the other hand, the lag of wages behind prices produces margin effects which are favorable to employment.

The quantity of catching-up and anticipatory buying is limited. As the timing effect of rising prices and wages diminishes in importance, the net effect of wage increases upon the volume of employment depends more and more upon the relationship between wages and prices and upon the margin effects of wage changes. It would be a happy accident, however, if the wage-price relationships which develop as the catching-up and anticipatory demands are diminishing were to make possible a precisely offsetting rise in demand based upon the current discovery of investment opportunities and the current propensity to consume. The end of catching-up and anticipatory buying may come either (1) with costs so high in relation to prices that full employment is unprofitable or (2) with prices so high in relation to costs that lower prices are expected. There is nothing to prevent these two opposite causes of unemployment from existing simultaneously in different industries or even in different plants within the same industry. When the end of catching-up and anticipatory buying finds wages too high in relation to prices, one has an example of upward pressure on wages which produces short-run inflationary (timing) effects but long-run deflationary (margin) effects. When strong anticipatory buying pushes prices too high in relation to wages, prices may rise quite far before their highness relative to costs is generally recognized. The sharp reversal of buying

policy which accompanies a change in expectations is likely to cause a precipitous drop in employment.

During periods of contraction, falling prices have the greatest opportunity to produce timing effects upon expenditures immediately after the downturn, when inventories are still swollen from anticipatory buying and when equipment is in good condition. The fact that wages decline less than prices during contraction is unfavorable to the immediate exploitation of the current flow of investment opportunities. Many economists believe, however, that the relative stability of wages during periods of contraction helps to limit the drop in demand because it reduces the expectations of lower prices. This may well be so, but the effect of stable wages upon prices is still uncertain. Undoubtedly, there are many cases in which wage reductions would help to sustain prices because they would reduce the pressure to gain liquidity by dumping inventories or by postponing repairs and replacements. Furthermore, since short-term marginal costs consist of labor costs and raw material costs, the maintenance of wages probably tends on balance to depress prices of raw materials, particularly those produced by the self-employed, such as farmers. The main argument in favor of no changes in wages at all (and it is a weighty one) is that uncertainty is itself an important deterrent to the execution of business plans. An easy and quick way to create certainties would be to make plain that there will be no changes in wages. A cycle of national negotiations for wage reductions in the railroad, steel, rubber, automobile, and coal industries would be a major source of uncertainty, and would probably induce considerable postponement of commitments.

All of the foregoing analysis adds up to the conclusion that the net effect of the spread of collective bargaining upon the cyclical movements of business cannot at present be satisfactorily forecast. It is quite certain that collective bargaining will reduce the tendency of wages to drop during periods of depression. It is uncertain whether the net effect will be stabilizing or unstabilizing. Stability of employment and production would probably be promoted if wages rose less rapidly than free market wages during periods of revival, but even this is uncertain. Slower wage movements at this time would give less support to the timing effect of price movements and, as catching-up and anticipatory buying was exhausted, would make possible a higher level of demand based upon the current flow of investment opportunities. The lag of wages, however, might produce lack of confidence in the price level. It is uncertain whether collective bargaining will make union wages rise more promptly or less promptly than free market wages. The fact that union wages in the past have risen less promptly than free market wages is not a satisfactory indication that this relationship will continue.

V

Let us now look beneath these short-run cyclical effects. The success of unions in maintaining wages during recessions and in pushing up wages during periods of expansion determines the relationship between wages and prices over the course of the cycle—the average relationship, if you will, around which cyclical fluctuations in employment occur. In fact it may determine whether the secular trend of employment is upward or downward and how much.

Suppose that technological progress is increasing output per man-hour at the rate of 3 per cent a year and that under the existing volume of unemployment unions are able and willing to push up wages 5 per cent a year. One of three things or a combination of them may happen: (1) the rise in wages may produce an offsetting secular rise in prices; (2) the pressure on wages may accelerate the rate of technological research and discovery so that the output per man-hour rises sufficiently to prevent an advance in labor costs; (3) unemployment may increase until either the willingness or the ability of unions to push up wages has been reduced to the rate of technological progress—3 per cent a year. At that level of unemployment, equilibrium will be established between the rate of technological progress on the one hand and the bargaining power of unions on the other hand.

Some economists have expressed the view that general changes in wages will not affect the volume of employment because these wage changes will produce offsetting changes in prices. Wages are said to be both a cost of production and a demand for goods. A general advance in wages, therefore, would simultaneously produce increases in costs and an offsetting rise in demand.[5] The view that prices can be counted upon more or less automatically to rise sufficiently to offset increases in costs must, I fear, be rejected. It presupposes that wage increases either (1) reduce the demand for cash balances (or their equivalent) or (2) increase the supply of money or (3) do enough of each so that expenditures rise exactly in proportion to the advance in wages. Certainly there is no reason to assume that a rise in costs would materially increase the supply of money. And since the effect of the advance in costs upon profit margins is at best uncertain, higher costs are likely to increase rather

[5] Mrs. Robinson has expressed this view as follows: "If entrepreneurs agree to pay their workers higher rates, money demand for goods is increased, and it is argued from this that activity and output will increase. But this rise in demand merely offsets the rise in the cost of production due to higher wages. A larger expenditure of money is now needed to buy the same goods and the increase in money income is not an increase in real purchasing power." (*Introduction to the Theory of Employment*, pp. 50–51.)

Hansen has expressed the same view in his book, *Fiscal Policy and Business Cycles*, though his reference is to wage cuts. "A cut in wages," he says, "is a two-edged sword. On the one side it cuts down costs, but on the other side it equally reduces demand. . . . The wage reduction cuts both cost and demand and this change cannot assure any increase in employment." (*Fiscal Policy and Business Cycles*, pp. 334–335.)

than to diminish the demand for cash balances. Hence a rise in costs, far from producing a precisely proportionate rise in expenditures, may produce no rise at all.

Particularly gratuitous is the assumption that a change in costs would produce precisely the secular trend in expenditures needed to keep long-term cost-price relationships unchanged. Suppose, for example, that there is a general rise in wages which results in a corresponding increase in costs. Some anticipatory buying may be precipitated which (as I have pointed out) may sustain temporarily a high volume of employment despite low profit margins or which may push up prices temporarily faster than costs. Observations of past wage and price movements would give businessmen no reason to base long-term investment plans upon the assumption that rises in labor costs will be offset by advances in prices. Unless special conditions make price expectations elastic, therefore, many would-be investors are likely to wait and see how completely the long-term movement of prices compensates for the rise in costs. The very decision to wait and see, however, will prevent prices from adjusting themselves to a rise in costs. Hence, the marginal return or capital will drop and equilibrium will be established at a lower level of employment than before.

VI

Even if prices do not rise in proportion to costs, may not a drop in income payments (and hence possibly a drop in employment) be prevented by the favorable effect of higher costs on the propensity to save? This is a possibility, but not a probability. The relationship of labor costs to prices affects the distribution of income and, therefore, the propensity to save and to consume. And, as pointed out in the previous section, it affects the quantity of investment opportunities which will be produced by a given rate of technological change. All of this means that, given a certain supply price for investment-seeking funds, one can construct a series of savings functions and investment functions showing the level of income payments, and indirectly the level of employment, which will accompany different cost-price relationships. In each case the level of income payments will be determined at the intersection of the appropriate savings and investment functions. If a given change in costs relative to prices produces equal shifts in the investment function and in the savings function, no change in incomes will result—although some changes in employment may occur. If changes in cost-price relationships affect the investment function more than the savings function, a lower level of income and employment will accompany upward shifts in costs. On the other hand, if shifts in costs relative to prices affect the propensity to save more than the volume of

investment opportunities, incomes will rise and fall as costs rise and fall.

As a practical matter, in what zone does the economy usually or actually operate? Does it ever operate in the zone in which the cyclical average of income and employment would be raised by a general rise in costs relative to prices? Probably not. Most of the time the economy is in a zone where changes in relative costs would produce greater shifts in the investment function than in the savings function, so that a lower cyclical average employment would accompany higher relative costs. Partly??

Certainly at low levels of income this is true, because a cost-price relationship which would destroy all investment opportunities would not destroy all savings. Unless at low levels of income investment opportunities are not more responsive than savings to drops in costs, incomes would never rise high enough to produce net savings.

Eventually, of course, a drop in costs might produce a greater shift in the savings function than in the investment function at a given rate of return. It is doubtful, however, whether this zone is ever reached. The effect of changes in cost-price relationships upon savings is not very great because even a large part of profits is consumed rather than saved. On the other hand, the volume of investment opportunities is quite sensitive to changes in costs relative to prices.

Empirical evidence on the zone in which the economy operates is yielded by the behavior of wages. If a rise in wages relative to prices increased the volume of employment, one general rise in wages would be followed by another. Hence, the economy would be quickly pushed into the zone where wage increases relative to prices diminish employment. On the other hand, if a reduction in wages diminished employment, one wage reduction would be followed by another. Hence, wage reductions, having once started, might be expected to go quite far. The economy exhibits neither the extremes of inflation nor the extremes of deflation which one would expect to find if wage increases raised the demand for labor and wage reductions reduced the demand for labor. Is this the reason?

Except when special monetary or credit conditions cause trouble (as in 1931 and 1932), the fluctuations of industrial production are within a range of 25 per cent and the fluctuations of real national income are even smaller. The stability of production and incomes is consistent with the view that, except for the relatively short periods of postponement and catching up, the economy operates in a zone in which increases in wages relative to prices limit employment and decreases in wages relative to prices increase employment.

VII

If prices fail to rise sufficiently to offset increases in labor costs, may

the rate of technological change be expected to increase sufficiently to keep wages and prices in the relation required for the previous volume of employment? Some response of the volume of industrial research to the pressure on wages is to be expected—particularly if collective bargaining does not extend to research workers. Nevertheless, there is no reason to believe that the response will be exactly enough to offset any tendency for upward pressure on wages to reduce investment opportunities below the number needed to maintain a given level of employment. Unemployment itself does not directly stimulate industrial research; research might be stimulated, however, by the encroachment upon profits which is the cause for unemployment. Nevertheless, it would be quite accidental if the stimulus and response were always precisely large enough to keep employment stable in the face of varying upward pressure upon wages.

The upward surge of industrial research is very powerful and is attributable to a multitude of causes. It started long before unions became important. Between 1880 and 1940, the number of gainful workers increased about threefold, but the number of chemists, assayers, and metallurgists about thirtyfold and the number of technical engineers almost fortyfold. Expenditures on industrial research have been rising by leaps and bounds. This movement will continue. It may be more than sufficient to offset upward pressure of unions upon wages. During the nineteenth century the industrial arts developed rapidly enough to make possible both a very rapid rise in wages and, contrary to the published index of prices, some drop in prices. There is no way of predicting whether or not this will continue to be true.

VIII

The foregoing analysis has examined the response of product prices or technological change to changes in the supply price of labor. What about the response of the supply price of labor to changes in the demand for labor? Experience shows that price movements usually precede wage movements. The fact that technological progress during the last hundred years has meant higher wages to a far greater extent than lower prices, indicates that the wage level *in the long run* adjusts itself to the price level more than the price level adjusts itself to the wage level. The response to increases in the demand for labor is usually a mixture—partly an employment response and partly a wage response. Does the growth of trade unionism mean that the labor market is becoming so organized that increases in the demand for labor produce prompt rises in the reservation prices of wage earners—leftward shifts in the labor supply curves?

Experience with collective bargaining since a high proportion of the

workforce has been unionized is still too brief to yield an answer to this question. If union wage movements continue to lag behind nonunion wage movements, as they have usually done in the past, and if the long-run rise of union wages is no greater than the long-run rise of nonunion wages, the answer to the question will be "no." Little is known about the determinants of union wage policies. When unemployment is fairly severe, unions may be dominated by unemployed minorities. As employment increases, the influence of the unemployed upon union wage policies rapidly diminishes. After employment has reached a fairly high level and unemployment among union members is not serious, the labor supply curve may become quite sensitive to further increases in the demand for labor. Hence increases in the demand for labor will more and more tend to raise wages and less and less to increase employment. Labor supply curves may become quite sensitive to increases in demand for labor when 5 per cent or even 10 per cent of the workforce are still unemployed. Efforts to raise employment beyond this point and to reduce the remaining amount of unemployment through deficit spending, for example, might mainly raise wages (and possibly prices) rather than increase employment.

IX

The response of prices and employment to changes in demand depends partly upon the slope of supply curves. Although the individual firm may have a horizontal or close to horizontal supply curve over a considerable range, individual industries and the economy as a whole seem to have sharply rising supply curves after a given point and before full employment has been reached. One reason probably is the fact that the least efficient part of the labor force is considerably less productive than the great majority. Another is the fact that the pattern of demand changes more quickly than the pattern of productive capacity. Consequently, growth and shifts in demand are constantly creating bottlenecks which cannot be immediately eliminated. For these various reasons it may be impossible to put all of the labor force to work at prices which people are willing to pay. Consumer resistance to higher prices may arise before the last of the labor force has been employed, or the higher prices necessary to put the last several million people to work may produce more savings than industry is willing to invest at the high cost of additional investment—investment cost determined by the high prices necessary to induce additional production. The history of price movements and wage movements shows that demand frequently exceeds supply and pushes up prices substantially while millions of people are still out of work.

If one conceives of a supply function for the economy as a whole, it

is important to ask whether the spread of collective bargaining has any significant effects on the slope of this function. The principal influence of collective bargaining is probably through the overtime rules of trade unions (now more or less embodied in the law by the Fair Labor Standards Act) which produce a sharp rise in the cost of overtime work. This may increase the difficulty of maintaining balance in the economy and avoiding bottlenecks which produce sharp rises in prices.

X

Will unions seriously limit investment opportunities and hence employment by promptly appropriating a large fraction of the profits of the most successful enterprises as rapidly as they accrue? This could be a consequence of the application of the ability-to-pay principle, provided unions were strong enough. Profits should be thought of in relation to the rate of expansion which they induce. A given outlook for profits will induce new capital to enter industry as rapidly as old capital is forced out or withdrawn. A better prospect will induce a certain rate of expansion and a still better prospect an even faster expansion. To the extent that unions are expected to encroach upon the profits of the more successful enterprises, they make the prospect for profits less favorable and limit the expansion of industry.

Even in unorganized industries one finds a disposition for the more prosperous plants to pay somewhat higher rates than the less prosperous. In so-called "perfect" markets this would not be so. Differences in ability to pay would express themselves solely in the size of firms. This is not, however, a world of "perfect" markets. Unions, too, in some industries and under some circumstances are disposed to adjust wages to a small extent on the basis of the ability of employers to pay. Nevertheless, unions have not gone very far in this direction, as the differences in the size of union firms testify. The coal miners' union is the principal exception. I do not expect that unions will go very far in negotiating wage differentials on the ability-to-pay principle—at least among employers who produce in the same city or region. The pressure of union members is all in the direction of imposing the same rates in different plants. Hence it is usually not good union politics to base union wage schedules upon the differing ability of different employers to pay.

XI

The relationship between the structure of wages (and the structure of prices also) to employment has been a neglected topic during recent years. And yet there can be no doubt that the structure of wages affects employment in many ways. For the most part the type of wage structure which more or less universal collective bargaining will produce

seems to be unpredictable. It will, of course, reflect the relative bargaining power of different unions and different employers or different groups of employers. Where unions are strong enough to negotiate particularly favorable wages and working conditions, the number of people attached to the plant or industry must be expected to be abnormally large. Consequently, better-than-average bargaining power on the part of unions must be expected to produce "wage-distortion unemployment"—unless the union is able to control this by a restrictive membership policy. It may turn out that certain classes of workers, such as research workers or salesmen, have particularly strong bargaining power. This could affect the investment function or the propensity to consume. It would be important if bargaining power were exceptionally strong among construction workers and if the cost of construction were, as a result, made high relative to other costs. As a matter of fact, wages of carpenters and bricklayers have gone up during the last hundred years little more than wages of nonagricultural workers in general—about tenfold between 1840 and 1940, as compared with ninefold for nonagricultural workers in general.

Several generalizations appear to be possible about the effect of the wage policies of unions upon the structure of wages. For example, union wage policies appear to have a tendency (1) to reduce differentials at least among union plants; (2) to increase the spread between the compensation of urban workers and farmers; (3) to impose a uniform floor under wages.

Greater geographical uniformity in wages reduces the capacity of the wage structure to induce the large movements of people which are required by differences in the natural rate of population growth in different parts of the country and by the fact that a large part of the increase in jobs occurs in a few areas. This discouragement of geographical movement may cause some unemployment, but its principal effect probably is to reduce the productivity of labor.

The tendency of union pressure on wages to increase the disparity between the compensation of urban workers and the incomes of farmers is temporarily obscured by the effects of the war upon agriculture. The disparity between urban incomes and incomes of farmers was great even before unions became powerful. The rise of unions will probably increase the spread between urban and agricultural incomes. The disparity limits the expansion of urban industries and, therefore, their capacity to absorb the surplus population originating on the farms. Here again the principal effect seems to be a reduction in the productivity of labor rather than the creation of unemployment. There is, of course, less intensive use of labor in agriculture than would otherwise be the case. The relatively high urban wage rates, however, encourage more people

to attach themselves to city industries than can find steady employment there and thus produce some urban unemployment.

The uniform minima imposed by unions are, as a rule, too high to have important employment effects, except possibly to force the earlier retirement of some men. The least efficient 5 or 10 per cent of the workforce are undoubtedly worth far less than the remaining 90 or 95 per cent. Most employers would be unwilling to pay the least efficient workers low enough wages to assure them steady employment, and most of the least efficient workers would probably prefer to go on relief than to work for no more than they are worth. Consequently, their chances of employment must depend largely upon special needs or emergencies which temporarily raise the marginal worth of labor far above usual levels. Even such emergencies may not yield much employment for the least efficient workers, because enterprises may find it more profitable to shift regular workers from their usual employments than to hire the least efficient people. The spread of minimum wage rates enforced by the government may exclude from large segments of industry the very people whose employment is most intermittent and who suffer most from unemployment. Union wage minima rarely have this effect. Unions operate mainly in industries where even the nonunion minima are too high to permit the steady employment of people who are in the twilight zone between employable and unemployable.

XII

What general conclusions are yielded by this analysis? By far the most important conclusion is that the great rise of unions seems to be creating a new kind of economy—an economy in which labor is held at reservation prices fixed by powerful organizations possessing almost complete control over some types of labor; an economy in which men have quasi-property rights to jobs and may not be replaced by men who are willing to do the same work for less; an economy in which upward pressure on wages, regardless of its effect on employment, is likely to be far greater than anything we have experienced; an economy in which increases in demand tend more and more to produce wage effects rather than employment effects. No one really knows how this economy will work and how wages and prices in it will behave. Only experience will reveal the answers to a number of crucial questions. Among these questions are:

1. Will technological progress be so rapid that, despite the great strength of trade unions, wage-price relationships will not in general be a serious problem for a number of years?

2. How will prices respond to wage increases which are too great for the rate of technological progress? Under what conditions is upward pressure on wages inflationary and under what conditions is it deflation-

ary? To what extent is a short-run inflationary effect achieved at the expense of a long-run deflationary effect?

3. Since the long-term movement of prices cannot be counted upon to offset rises in labor costs, must the government choose between developing devices to raise prices by artificial means and supplanting collective bargaining with government wage fixing?

4. To what extent will the spread of collective bargaining limit the capacity of the economy to give employment either by producing shifts in the labor supply curve or changing the slope of the economy's supply function.

5. How weak must unions be, for example, or how severely regulated, in order for deficit financing or any other form of spending to raise employment effectively?

6. What is the range within which increases in public or private spending may be quite effective in raising employment rather than wages or prices? At what level of employment do increases in spending rapidly lose their effectiveness in raising employment?

7. To what extent is collective bargaining likely to affect the volume of unemployment attributable to the structure of wages?

Exploration of the relation of wages and prices to employment cannot fail to impress one with the deplorable state of the theory of employment. Many formulations of employment theory assume that wages have little or nothing to do with employment. And yet the assumption that general changes in wages produce precisely proportionate changes in MV is quite as gratuitous as the neoclassical assumption that they produce no changes in MV. Employment is affected by the response (or lack of response) of demand to changes in wages, by the response of wages to changes in demand, and by the structure of wages. It is also clear that changes in prices cannot be counted upon to offset changes in wages. Employment theory has attacked the problem of employment almost entirely in terms of spending, either public or private, to the neglect of conditions of supply. The assumption has been tacitly made that resources would go to work pretty much in proportion to changes in the volume of spending. Virtually no attention has been given to the possibility that supply curves beyond a certain range may not be horizontal or close to horizontal, but may rise sharply, and that they may not be independent of demand, but may shift as demand rises and falls. Trade unions are essentially devices for making the supply prices of the services of their members (1) less responsive to drops in demand and (2) more responsive to increases in demand. There is a touch of irony in the fact that while employment theory has been neglecting the supply aspect of the employment problem, the labor market was being rapidly organized to make supply prices behave differently from the assumptions

found in most current employment theory. The time is overripe to rescue employment theory from its narrow preoccupation with spending and to include in it a consideration of the conditions of supply and of the effects of changes in demand upon reservation prices.

Let me close with a word about the makers of wage and employment policy. Everyone regards full employment as a worthy objective, and yet what policy makers are in a position to give much weight to the effect of their decisions upon the general level of employment? Certainly not the wage policy makers in trade unions or in business enterprises. Even government officials, though glad to give lip service to the idea of full employment, place winning elections ahead of increasing the number of jobs. The politicians, I believe, underestimate the willingness of the man in the street to think in terms of national interest, but they know that many votes are gained by catering to well-established superstitions and prejudices and by helping politically strong groups pursue their special objectives regardless of the effect upon employment. "Automatic" economic forces may or may not keep the country fairly close to full employment. Private or public policies may be needed to supplement "automatic" forces. Neither private nor public policies, however, *can be counted* upon to produce full employment, because all policy makers must compromise between this objective and many rival ones.

DISCUSSION

JOHN H. G. PIERSON: The keynote of Dr. Hart's remarks is that economists should recognize the uncertainty of future developments and the consequent need for flexibility in our stabilization policy. In this I heartily concur. Forecasts are a precarious basis for stabilization programs. I also concur in a majority of the other detailed opinions expressed in Hart's paper.

But has Hart carried his reasoning through to its logical conclusion? His recommendations would have us meet uncertainty by a "feeling-out process." I do not think that this is sufficient. I believe we should meet uncertainty by a form of over-all economic insurance. Insurance eliminates guesswork, promotes confidence, and guarantees results. A feeling-out process is too tentative to yield these benefits.

While I say "insurance" advisedly and am not indulging in a figure of speech, I admit to using the word in a loose sense. I do not have actuarial soundness in mind. Existing governmental insurance systems may or may not be thought to operate on actuarial principles; no such claim is advanced in this case. Nevertheless, I hope that my usage may be condoned, because I am looking for a strong word that rejects the idea of "doing the best we can" in the matter of employment and instead conveys the idea of a definite commitment.

I do literally suggest the establishment of a form of *underwriting* whereby the federal government *assures* whom it may concern that unemployment will not exceed the amount decided upon as consistent with full employment in the operating sense. This seems a reasonable proposition if full employment is practically attainable and what we want. If we want it, we want to be sure of it—especially since confidence actually simplifies attainment. To be sure of it we need to insure it. This applies to the period of launching stabilization as well as to any other period.

Hart's recommendations are not, I take it, necessarily in conflict with this, provided it can be done. His argument does move back and forth a bit between maintaining full employment and combatting serious unemployment. But I notice that, when all hell finally breaks loose in his manuscript, with his "gong" sounding the rise of unemployment above a stated moderate figure at the same moment that his "whistle" warns of an upward cost-price spiral, he is all for heeding the gong as well as the whistle.

For insurance of full employment to be workable, two things are clearly necessary: (1) Uncertainty must be removed as to what full employment is, in order to avoid dispute as to when the government should expand or curtail its own employment-giving operations. (2) The body of full employment policy as a whole must be such that the government action available to back up a solid and meaningful guaranty of full employment can be seen to be in harmony with the other traditional values of our economy. This has two main corollaries: (a) reliance on compensatory fiscal action of any kind must, as time goes by, be kept within reasonable limits; (b) reliance on extra public works and services to provide employment must be kept within limits that are definitely narrow.

Can uncertainty be removed as to what full employment is? Hart has given us his conceptual definition (a situation where unemployment is exclusively "frictional") and he has also pointed out the need to set specific standards and to formalize machinery for keeping track of current events, so that we may know when to act. Being in agreement with these suggestions, I should like to try to clinch the matter with some further observations about procedure. Concretely, a satisfactory working definition of full employment would appear to be attainable through a continuous process operating roughly as follows:

1. *Recommendation:* The President in an annual economic message to Congress proposes, let us imagine, a numerical employment or unemployment standard for the coming year—one that his economic advisers believe will create a situation in which all those wanting and able to work will have a chance to do so. This standard may be in the form of an annual average—for example, in a particular year it might be an average of 59 million jobs, including self-employed and armed forces—or the allowances deemed necessary for seasonal variation may be mentioned specifically. Probably, in addition to a floor, there will also be suggested a ceiling at which curtailment of public works, etc., should be brought into play to prevent a further rise in total employment.

2. *Legislation:* After analysis of the President's recommendation by a suitable Congressional committee, Congress makes its own determination and underwrites the minimum level agreed upon, presumably also setting a top limit. This action establishes the official, administrative definition for the ensuing year. At the same time Congress instructs the President to use specified means—including, as last resort, variations in the volume of public works and services—to effectuate its stated purpose with respect to the level of employment, and provides contingent appropriations for use in the specified ways if necessary.

3. *Administration:* A designated agency keeps track of current employment and unemployment and notifies the agency responsible for public works, etc., when expansion or contraction is required to keep total employment within the limits set by Congress. The resulting action by the public works agency serves as the final guaranty that full employment, as defined, is maintained.

4. *Re-evaluation:* The appropriate agencies continue their quantitative and qualitative studies of the labor force data. For example, they analyze: unemployment by type, by location, by duration, by group affected; part-time employment; the relation of vacancies to applications; the existence or absence of concealed unemployment in such sectors as agriculture. These studies show how well the current numerical definition of full employment accords with the underlying aim of universal job opportunity. Allowing also for secular growth of the labor force, changes can if necessary be suggested in the level at which, or possibly the terms or form in which, full employment should be defined thereafter. The President is thus prepared for his next year's recommendation to Congress. This completes the circle.

The reason I have discussed the question of definition at such length is

that there appear to be many who believe that full employment must always remain indeterminate. We are told that full employment is a goal so high and so vague that, while we should strive in the direction of it, we cannot hope to achieve it and therefore cannot assure that it will be achieved. My discussion, however, has aimed to show that, on the contrary, full employment is perfectly determinate for working purposes. This surely is all that matters.

Of course the chief problem remains—the development of a policy approach consistent with the other fundamentals of our economy and hence acceptable in practice. This problem is difficult enough so that failure to get at the issues could easily be fatal to full employment. Here I feel that Hart's treatment is deficient. Although his individual propositions seem reasonable, the principle needed to serve as a "binder" is missing. This principle I believe to be that *total consumer expenditure should be underwritten* at a high level, as well as employment itself.

The reason for underwriting consumer spending separately is that the maintenance of an aggregate of gross national expenditures sufficiently high to sustain full employment might otherwise entail more reliance on public works and services than was physically possible, or more reliance than the system of private enterprise could stand.

Forecasts of time and amount are treacherous and, in any case, unnecessary. It is enough to take warning from past saving and spending habits that a situation can easily arise, once wartime savings and the backlog of deferred demand no longer control the situation, where even the disposable income resulting from full employment conditions would tend to leave effective demand considerably short of what is required to have the full employment conditions continue. May I introduce for Hart's consideration a new sound—the "squawk"? The squawk will occur, with both "gong" and "whistle" silent, when employment is full momentarily but markets start dwindling because of insufficient respending of full employment income. In short, the squawk registers the pure, initial strain of deflation. Seriously, with this deflationary virus latent in the system and no remedy visualized except expansion of government expenditures for goods and services—chiefly for public works—it seems to me quite unrealistic to suppose that the government would guarantee full employment.

Assume, however, a floor and ceiling for consumer expenditure as well as a floor and ceiling for employment as a whole, and assume the consumer expenditure quota to be calculated from probable business plus government demand subtracted from a roughly computed full employment volume of gross national expenditures. This creates a very different perspective, not dominated by public works. I presuppose that private investment will here be estimated as optimistically as warranted by prevailing incentives to business expansion—including the encouragement provided by continuously assured full employment not based on expansion of government programs—while government demand will be accounted for on the basis of programs approved for their own sake irrespective of labor-market conditions.

This policy approach, unlike the other, gives tangible assurance that the

main emphasis in the full employment program is on expanded private employment, and that supplementary public works can therefore be held within suitably narrow limits. Hence I believe that it meets the crucial difficulty noted above.

Naturally the added support for consumer spending that may often be required under this policy will involve a reduction of tax revenues or an increase in transfer payments, either of which will tend to unbalance the federal budget. Since the practical possibility of insuring full employment might be endangered by the prospect of continuing heavy deficits, even without the aforementioned threat of vast public works, the other main requirement is action to keep the need for compensatory measures as a whole within reasonable limits.

Success in this endeavor depends in substantial degree on wage-price policy. Parenthetically, the existence of the complex and difficult wage-price problem cannot be laid at the door of full employment. Indeed, psychologically this problem should be easier to work on co-operatively once a convincing full employment policy is adopted, bringing income security to the worker and making higher break-even points evidently practicable. Furthermore, a ceiling on consumer spending provided by an underwriting formula will help prevent an inflationary spiral.

In the fiscal-monetary field, it is necessary to distinguish between compensatory measures as such and basic measures of permanent value in reducing the need for compensatory action—such as taxation that is progressive but encourages risk-taking, expanded public welfare expenditures, preferably with suitable use of a capital budget, and an overhauling of social security financing methods. A third type of action mentioned by Hart, which overlaps the foregoing in the realm of credit control, involves heading off speculative, inflationary movements that would lead to collapse and deflation later on. A fourth great field involves promotion of competition and control of inevitable monopoly.

I need not extend this list. Hart has referred to the necessity for disagreements among economists. One of the areas in which disagreements are bound to continue and are bound to prove fruitful is the area of detailed blocking-in of these basic policies for promoting a better natural balance in our economy and thus reducing the need for artificial compensations. A second area for disagreement involves the best form of compensatory adjustment of consumer purchasing power and expenditure, under a policy based on the underwriting principle.

Hart has urged maximum use of "built-in flexibility" of policy—which is to be secured, under given tax and benefit rates, through heavy reliance on income taxes and social security. I think that a warning should be sounded against exaggerated reliance on built-in flexibility in just this particular sense. What is implied is large variations in income and employment levels. The argument therefore relates essentially to an economy that is expanding and contracting rather than to a full employment economy.

I agree, however, with Hart's emphasis on the need for deliberate short-term changes in tax rates or exemptions and in monetary policy, as well

as in public works. Money and debt management should have considerable leverage on consumer spending if the government will create new money with which to retire its debt. The personal income tax should be readily adjustable, and perhaps social security levies also. Persons not affected by reduction of such taxes might possibly be compensated in cash by rebate of imputed indirect taxes paid to any tax jurisdiction or in kind through a stamp plan or other arrangement allowing purchase of basic necessities at reduced prices. If necessary to prevent an inflationary rise in consumer spending above the established ceiling, a graduated spendings tax with high exemptions might be brought into play, other methods failing.

These, as already conceded, are issues on which there is much to be gained from present disagreements. What I hope will *not* be a subject for disagreement indefinitely among political economists concerned with the establishment of continuing full employment, is the need for an advance commitment underwriting total employment—this commitment in turn made workable by the underwriting of consumer spending. It seems to me that a policy to assure an ample market for the normal products of business, and keep government out of unpremeditated competition with business, should commend itself to common sense.

William J. Fellner: The range of significant problems covered by Dr. Hart's penetrating analysis is broad, and the discussants can of course not be expected to consider all the questions raised in the paper. My observations, for example, will almost completely disregard the difficulties of postwar transition. I believe that these may prove to be serious and that, especially in the event of an inflationary outburst, the authorities are ill-equipped for controlling the disequilibrating factors. It would clearly be desirable to increase the power of the Federal Reserve Board over reserve requirements and also to adopt a more flexible tax policy. Yet while these reforms would be desirable, it is uncertain whether they—or any politically feasible measure—would in the present circumstances forestall inflation if the rate of turnover of the money stock should tend to increase. Instead of discussing these problems of the transition period, I shall now, however, turn to the longer-range aspects of full employment policy. I shall be concerned mainly with the relationship between full employment policy on the one hand and direct controls on the other.

A rigid guarantee of a high level of employment would undoubtedly require a comprehensive system of direct controls. Otherwise, monopolistic labor and business groups would find it easy to raise their money earnings and to reduce the quality of their services against the background of the full employment guarantee. The inflationary pressure would be increased by the tendency to dishoard idle balances. Furthermore, the occupational and regional mobility of resources would be reduced by the insistence of considerable sections of the labor force on being granted employment in definite industries and areas, regardless of the interests of the economy as a whole. Considering all these circumstances, a policy of guaranteed high employment would require rigorous direct controls, extending to the wage

and price level, the quality of the goods produced and of the services performed, and also to the factors affecting the mobility of resources.

Sir William Beveridge believes that wage controls would not be necessary because if the labor force were represented in all wage bargains by a single union organized on a national scale, then the national labor representatives would realize that inflationary wage increases—that is, wage increases associated with a corresponding rise in the cost of living—do not serve the interests of labor as a whole. I do not share this optimism because even a nationally organized over-all union would have to take account of the pressures originating in the single constituent groups. The politically expedient way of keeping the constituent groups happy would be that of yielding to the various groups in succession. Aside from this, the nationally organized union might frequently maintain that the wage increases it is advocating should not lead to increases in the price level, while in reality they would result in price increases. I am convinced, therefore, that the policy of a guaranteed level of high employment would make necessary the adoption of comprehensive direct controls and that the wage level and the terms on which labor services are performed could not be exempted from the controls.

Dr. Hart and many economists would agree that this does not mean that we must have either a rigorous system of direct controls or periods of mass unemployment. Preventing cumulative deflation and mass unemployment is not the same thing as guaranteeing full employment. The necessary adjustments occurring in periods of business recession are made very much more difficult by the cumulative shrinkage of aggregate demand by which they frequently degenerate into major depressions. In the future it will be imperative to counteract the tendency of aggregate demand to shrink abruptly, and this will have to be done in early stages of recessions. It will be imperative to do this because protracted unemployment of considerable sections of the population has rightly come to be considered an intolerable condition. I do not believe that the objective of preventing recessions from developing into major and protracted depressions would require a mechanism of control comparable to that which would be called for by an unconditional full employment guarantee.

If the objective is that of preventing cumulative deflation, the monetary and fiscal authorities may be guided by price level considerations as well as by employment considerations. They may start expansionary policies in early stages of recessions, and they may discontinue these if dangerous wage and price developments get under way. In other words, the authority may aim at the maximum level of employment compatible with a reasonably stable price level (which clearly is not the same thing as guaranteeing full employment regardless of wage and price tendencies and then bringing wage and price tendencies in line by controls). If the maximum level of employment compatible with a reasonably stable price level proves to be a high level of employment, then it will be possible to accomplish two vital objectives at the same time, without producing abrupt changes in the institutional setting. I believe that there exists a fair chance that it will be possible to accomplish the two objectives in question by the appropriate

policies. At any rate it is necessary to make a serious effort in this direction because it will not be possible to avoid abrupt institutional changes unless we will be successful in maintaining a reasonably high level of employment and a reasonably stable price level at the same time.

The effort should, I think, consist of starting expansionary policies in early stages of business recessions and of making it known in advance that these policies will be discontinued or reversed if and when harmful wage and price developments get under way. It might be useful to define harmful wage and price developments in advance, in terms of the specific *ad hoc* requirements of the periods in which the policies in question are undertaken so that the power groups concerned should be aware of what constitutes a behavior that would impel the authorities to reverse their policies. It is to be hoped that in these circumstances inflationary symptoms will not show before satisfactory levels of activity are reached. If this hope should prove vain—that is, if economic power groups should start inflationary processes at low levels of activity—then the policy here considered would break down and a situation would arise in which comprehensive controls could scarcely be avoided. But although we should always be prepared for an unfavorable turn of events, we should not be defeatists in this respect. The past record does not compel us to expect that it will be necessary to discontinue expansionary policies and to adopt counterinflationary measures at low levels of activity. It is true that in the past inflationary tendencies have occasionally developed at unsatisfactory levels of activity, although, when they have developed at such levels, it usually was possible to attribute them to special circumstances. It is conceivable that in the future inflationary tendencies would develop at low levels of activity, even in the absence of special circumstances, due to the increased power of labor organizations and of monopoly groups in general. But while such tendencies are conceivable, it would not be justified to take them for granted in advance, especially if it will be known that certain wage and price developments would induce the authorities to shift from expansionary to counter-inflationary measures. It seems worth while to try the policy of vigorously counteracting cumulative deflation whenever it tends to develop; and of aiming at the maximum level of employment that is compatible with a reasonably stable and reasonably free price level.

Expansionary policies should not consist exclusively of monetary and fiscal measures. Without adequate wage-price policies, monetary and fiscal devices cannot accomplish the desired objective. But a policy abstaining from the use of monetary and fiscal measures could certainly not be successful. It follows that under a reasonable policy the public debt would tend to rise in periods of recession. Whether the debt would tend to decline correspondingly in periods of high activity depends on the relative strength of the expansionary and the contractionary forces in the economy. There is no assurance that it will be possible to avoid a further increase in the public debt in the passage of time. This does not necessarily mean that the interest on the public dept will have to rise *as a percentage of national income*. The interest burden will not rise in relation to national income, provided the

future increase in productivity is sufficiently high and provided the rate of increase in the public debt does not exceed certain limits. In spite of this, I believe that it would be wise to find means by which further additions to the debt could be financed free of interest. The straightforward way of avoiding the internal transfer problem would be that of borrowing from the Federal Reserve banks directly. It might, however, be possible to circumvent the so-called "public debt problem" also by having the Federal Reserve banks buy securities whenever the government sells new securities to the market. To tax away the earnings of the Federal Reserve banks in excess of a definite rate of profit should not create serious difficulties.

With the present methods of financing, the public debt problem is not entirely a fictitious problem. However, direct or indirect financing by central banks would change it into a fictitious problem as concerns further additions to the debt. The inflation danger involved in borrowing from central banks is no greater than that associated with borrowing from commercial banks, provided reserve requirements are under control. And as for the earnings of the commercial banks, it is by no means obvious that the monetary authority acts in the interest of the banks if it brings about a further increase in their holdings of government securities.

Clark Warburton: At the beginning of my remarks, I want to emphasize the fact that they represent personal views only. My comments on Mr. Sweezy's paper relate to some basic assumptions which he does not state specifically but which underlie, or at least appear to me to underlie, most of his reasoning. The assumptions which I have selected for comment are, of course, those with which I disagree.

1. In the first paragraph of his paper, Mr. Sweezy states that "throughout most of the nineteenth century private spending was adequate to provide a market for a reasonably high level of output," and implies that this has not been true throughout most of the twentieth century. The factual data with which I am acquainted indicate that during the first three decades of the twentieth century private spending was as adequate as it was during the nineteenth century; only in the fourth decade did it become less adequate. Failure to note the date when private spending became inadequate probably underlies Mr. Sweezy's acceptance of the stagnation thesis. I cannot see how the stagnation thesis provides a reasonable explanation of the rapid collapse of consumer expenditures in the early thirties.

2. Another assumption of Mr. Sweezy is that the inadequacy of private spending, when it developed, was due to a maladjusted relationship between the tendency of income recipients to save and the tendency of business to utilize savings through capital investment, and that this maladjustment resulted from lack of investment opportunities. This is a popular assumption, but I have been unable to find in the Keynesian literature or elsewhere any factual evidence in its support which seems to me valid or plausible.

3. Mr. Sweezy assumes that the propensity to consume is one of the inflexible or lagging elements in the economy relative to the rising standard of

living made possible by technological progress and the amount of investment necessary for achievement of that standard of living. Such examination as I have been able to make of the information provided by surveys of family expenditures over a period of time and under varying conditions and by the aggregate data for consumers' expenditures does not support that assumption.

4. Mr. Sweezy concludes—because of his assumption regarding the character of the tendency to save—that a large volume of investment or in its absence a government deficit will be required to keep income and employment at a high level. This conclusion, however, involves another basic assumption; namely, that the volume of income and employment is primarily dependent upon the volume of investment or on the sum of such investment and the amount of the government deficit. This assumption, it seems to me, is invalid. With respect to investment the main line of causation runs in the other direction. The volume of investment is the result of business judgment as to the probable amount of consumer income and purchases in the future, and this judgment is heavily influenced by the current situation and current trends. The observation that in the past we have had high levels of investment under conditions of high employment reflects the simple fact that when employment and income are high, business finds that it is profitable to spend large amounts for expansion. With respect to a government deficit, Mr. Sweezy confuses a deficit—which is the borrowing of money—with monetary policy—which governs the creation of money.

5. In speaking of monetary policy under nineteenth century conditions, Mr. Sweezy states: "Private investment was highly responsive to changes in interest rates." With this observation I am in agreement, subject to a qualification to which Mr. Sweezy, I assume, will not object; namely, that private investment in the nineteenth century was also responsive to changes in the character of demand. For example, when the people desired to adjust the economy to the technological developments which made railroads possible and profitable, private investment increased even though interest rates tended to rise. However, Mr. Sweezy implies that the responsiveness of private investment to changes in interest rates has disappeared in the twentieth century, at least since World War I. To me, the twenties and thirties seem to be a typical example of the joint responsiveness of investment to changes in the character of demand and in interest rates. In the middle twenties we were adjusting our economy to the advent of the automobile and investment was large even though interest rates were high relative to those in previous decades, but as the extraordinary demand for durable goods receded interest rates tended to drop toward the lower level at the beginning of the century. From the spring of 1922 to the beginning of 1928 the average of Moody's corporate bond yields and of bank rates on commercial loans in principal cities dropped approximately 1 per cent, or nearly one-fifth. But in 1928 and 1929 the interest rate, judged by the same data, was pushed up and with some irregularity remained up until after the banking holiday. The great shrinkage in investment in the early thirties was

an especially striking case of the nineteenth century type of response to interest rates which were abnormally high in view of the character of developments in the economy.

6. In summarizing his paper, Mr. Sweezy referred to the demand for cash balances in such a way as to imply that the quantity of money in the economy, or the money supply held by the people and enterprises of the nation, is influenced primarily by forces operating on demand. This assumption ignores the nature of the money-creating industry, which is such as to give predominant influence to the conditions of supply.

7. In his closing remarks on monetary policy, Mr. Sweezy says: "The chief function of monetary policy will be to keep interest rates low." This statement appears to identify monetary policy with interest rate policy, and as I see the problem involves a thoroughgoing misconception of the fundamental character of monetary policy and of its relation to interest rates. Monetary policy, as I view it, should be directly concerned with the nation's circulating medium, and should aim to provide an adequate but not excessive quantity of money for the use of business in acquiring labor and materials, for use by the people of the nation in purchasing the output of the nation's industries, and for individuals and business to hold for future contingencies. If this aim is achieved, savings, investment, and interest rates can mutually adjust themselves through the loan and capital flotation markets, provided those markets are reasonably well organized.

8. Mr. Sweezy states, in his final paragraph, that "the best fiscal policy in the world will not assure us stable full employment unless we also have a reasonable degree of stability in the price and cost structure." He asks the questions: "What are the chances that such stability will come of itself?" and "What kind of controls can we devise if it does not?" leaving the answers to the next speaker. Since monetary policy is Mr. Sweezy's subject, this treatment of the problem of price and cost stability involves an assumption that such stability has relatively little to do with monetary policy. This seems to me, both on the basis of economic theory and factual evidence, erroneous. On the contrary, the basic function of monetary policy is to determine and to maintain at a fair degree of stability the equilibrium center of the price system. Unless such stability is achieved, there is no possibility of stability in the price and cost structure.

Because of these assumptions Mr. Sweezy, I think, has missed the important factual and theoretical relationships of monetary policy to the problem of full employment, both in the past and in the postwar period. Since these relationships are of crucial significance for economic policy in the immediate future and in the years to come, I would like to add a few comments on them.

The private spending to which Mr. Sweezy refers represents the use of money by the people of the nation. It is therefore important to analyze the data in cases in the past when private spending slumped (as at the end of the twenties) to see whether the change in the rate of spending reflected a change in habits of use of money or a change in the quantity of money available in the economy. The data for the period of transition from the pros-

perity of the mid-twenties to the great depression of the early thirties provides factual evidence, which appears to have been overlooked by the Keynesians, of the predominant importance of a maladjusted supply of money rather than of maladjusted savings and investment relationships. The latter, in the absence of the former, would have been reflected in a slowing down of the rate of use of money. The data show that the depression drop in the circular velocity of money lagged significantly behind monetary deficiency.

The data for the period since the close of World War I which I have examined supports the theory of the price level and of business fluctuations developed prior to World War I and abandoned by the Keynesians without factual investigation; namely, (a) that changes in the level of prices of the output of the economy depend dominantly upon changes in the quantity of the circulating medium relative to the productive capacity of the nation and trends in habits of use of money, and (b) that in a private enterprise economy the absence of reasonably full employment on the one hand and the occurrence of inflationary prices on the other are primarily due, respectively, to monetary deficiency and to excessive monetary expansion.

When monetary policy causes monetary deficiency, as it did at the end of the twenties and in the early thirties, that deficiency produces artificially high interest rates and the responsiveness of investment to those rates makes the volume of investment shrink to abnormally low levels. When monetary policy operates in the reverse direction and produces an excessive rate of monetary expansion, the resulting artificially low rates of interest may generate economically undesirable types of investment to the detriment of the production of goods and services desired for consumption. This view of the problem does not mean a belief that postwar interest rates, with proper monetary policy, should or will rise. What it does imply is that prosperity without inflation requires a monetary policy which does not interfere with a reasonable volume of investment by pulling interest rates out of adjustment with the basic conditions of the economy.

So long as we continue the highly excessive rate of monetary expansion of the past two years, its inevitable repercussions upon prices and upon costs will keep them in constant turmoil relative to each other and thus make settlement of labor unrest and achievement of business stability impossible. If, on the other hand, we repeat World War I postwar policy, and after the final war loan suddenly reverse the policy of expansion and institute a policy of contraction, we will again produce a price collapse and business depression.

A reasonable course in monetary policy—avoiding excessive expansion on the one hand and deficiency on the other—is the indispensable condition for maintenance of private spending at a rate sufficient to absorb the output of the economy and at the same time to avoid the injustices and disturbances of inflation. Monetary policy, instead of being a subsidiary element in a set of policies designed for economic stabilization at a high level of employment, is of paramount importance.

Abba P. Lerner: I do not believe one can approach the problem of employment by regarding wage policy as a means of implementing an employment policy. In agreeing to discuss the question as stated, Professor Slichter found himself caught by the implication that in some way or other wage policy is important for employment. Professor Slichter's inability to distil any significant conclusions out of his analysis and the repeated inconclusive balancing of arguments "on the one hand and on the other hand" may have seemed disappointing to some listeners. But this disappointment is due only to the impropriety of the question's implications. The same analysis would have appeared to yield a definite negative answer if the question had been asked whether or not it is fruitful to approach the problem of employment from the angle of wage policy instead of assuming this to be the case.

It will be noted that I have taken the further liberty of formulating the question as concerned with *wage* policy and not with *wage-price* policy. This was also assumed by Professor Slichter, although for him the difference is not as crucial as it is from my point of view. In any case what he discussed was the effect of decisions affecting money wages. This was inevitable because the real decisions are about money wages. What effect a change in money wages would have on the wage-price relationship—and indeed most importantly whether it would have any such effect at all—is part of the answer and should not be prejudged by incorporation in the question.

What can we say about the effect of a general increase in money wages on the volume of employment? Professor Slichter begins by dismissing the view that a general rise in money wages would result in a proportionate rise in the prices of the products. He says that this view "presupposes that wage increases (1) either reduce the demand for cash balances (or their equivalent) or (2) increase the supply of money or (3) do enough of each so that expenditures rise exactly in proportion to the rise in wages." He declares that certainly there is no reason for supposing that any of these things would happen, and that particularly gratuitous is the assumption that a change in costs would produce *precisely* the change in expenditures needed to keep cost-price relationships (and thus the volume of employment) unchanged.

The plausibility of Professor Slichter's objections depends on treating these conditions as if they were independent outside influences which good fortune must bring on the scene at just the right time and in just the right measure. If the argument depended on such a glorious coincidence it certainly would be very foolish. But this is not the nature of the argument concerned. When marginal costs are raised not only in a single manufacturer's plant but in that of all his competitors as well as in the factories of all the industries producing competitive products, only a price rise *in the same proportion* as the cost rise is capable of restoring equilibrium as long as there is the same propensity to consume and the same real inducement to invest. And in this equilibrium there will also be the same volume of employment. As long as prices have risen less than wages, marginal revenue will be lower than before in relation to marginal cost and every firm will want to raise its price. It will not be deterred from this by fear of losing

sales, because it will want to *reduce* sales for maximizing its profit even if this did not raise the price of its product. And as long as employment is less than before, the community will want to save less than is being invested, the difference showing itself in unintended savings by business out of unexpected profits. This will generate expansion until the previous equilibrium volume of employment is restored and income has risen to the level where the amount society wants to save no longer falls short of the volume of investment and profits are back to normal.

It is true that in the new situation the total level of money expenditures in connection with the normal operation of the economy will be greater; so that unless people can manage to carry on their business at the higher price level without increasing their nominal cash balances the cash balances will have to be increased. This is the meaning of the three conditions stipulated by Professor Slichter. But no tremendous coincidence is to be seen in people having a sufficiently generous supply of money to be able to manage to carry out the same number of transactions even at a higher price level, or in the banks having sufficient excess reserves to be willing to supply any extra money that might be needed because of the higher price level. This would of course mean an increase in the velocity of circulation or in the amount of money just the right degree. But that would be the result not of coincidence but of adjustment to the changed conditions. No miracle is involved in an adjustment approximating the degree that people try to bring it about.

But this is not the basic answer to Professor Slichter's dismissal of the Keynesian thesis. For it is perfectly possible that there would not be enough slack in either individuals' cash balances or in the banks' excess reserves. But in that case the unemployment that Professor Slichter sees as a result of the increased wage rate would come about because there is a deficiency in the amount of money. This deficiency would show itself in the form of higher rates of interest, and the unemployment would come about to the degree that the higher rate of interest induces consumers to reduce their consumption and investors to reduce their rate of investment. In that case the whole difficulty could be avoided very simply by the authorities creating the additional money needed. This it would do unless it believed that the unemployment was preferable to the increase in the amount of money.

Even if the authorities should choose unemployment, the unemployment would not be because of a rise in the wage-price ratio. It would be because of an inadequacy of demand in the new conditions. The trouble here is largely traceable to J. M. Keynes's assumption, in *The General Theory of Employment Interest and Money*, that the wage-price ratio will fall with increasing employment because of diminishing returns. This was not at all essential to the theory of the determination of the volume of employment, and Keynes incorporated it only because it happened to be lying around in the classical theory of Marshall (and Marx) and he had no quarrel with it. Statistical studies by Dunlop and others have shown that the principle of diminishing returns is not directly applicable to this question because possible variations in the degree of monopoly complicate the picture. At the present moment the direction of correlation between the wage-price ratio

and the volume of employment is not free from doubt, and it is best to leave the whole matter out of the theory of employment in which it never played an essential part. Professor Slichter seems to have been misled, by Keynes's polite nod of recognition to the principle of diminishing returns, into supposing that the volume of employment is necessarily a diminishing function of the wage-price ratio—that any increase in employment can come about only at the cost of a fall in the real wage; and conversely that any increase in the real wage involves a corresponding fall in the volume of employment.

Professor Slichter thus finds himself analyzing the effects of a rise in wages on the volume of employment on the assumption that prices remain unchanged. Any increase in the wage is then an increase in the wage-price ratio and wage policy really becomes wage-price policy. The rest of Professor Slichter's analysis follows this line. He considers the effect of the redistribution of real income from capitalists to workers in order to see what would be the effect on the volume of demand and so on the volume of employment. The shift of real income from capitalists whose profit margins are cut to workers whose real income is increased tends to increase aggregate demand, and the fall in the marginal efficiency of investment because of the reduced profit margin tends to reduce aggregate demand. Professor Slichter cogently points out that there is no reason for assuming these two forces to cancel each other exactly, and believes this to be another refutation of the Keynesian thesis that there is no change in the volume of employment from a change in the wage rate. He goes on to argue, most convincingly, that the decrease in investment is likely to be much larger than the increase in consumption so that the net effect will be a reduction in employment.

But all this analysis rests on Professor Slichter's assumption that prices do not rise as much as wages. If it is to be applicable to the real world there must be a real force, more effective than Professor Slichter's assumption, which keeps price from rising proportionately to wages.

An inadequacy in the stock of money might possibly have this effect if the authorities failed to provide the liquidity necessary to maintain employment and if at the same time the effects of diminishing returns were significant and not offset by changes in the degree of monopoly. But the only way in which this condition could be brought about with the certainty that Professor Slichter accepts it would be by the government intervening to impose price ceilings which were effectively administered and not evaded by black-market operations.

In this kind of society Professor Slichter's analysis would be valid. An increase in wages, by diminishing the profitability of investment, would decrease employment unless this was offset by the increased demand by workers out of their greater real incomes. It is most probable that the former would be a much stronger influence than the latter; so that the net effect of increasing wages would be to diminish employment.

Professor Slichter, believing that the argument applies to an actual world in which prices are free to adjust themselves to the market, feels it necessary to give additional reasons for supposing the adverse effect on investment to

be greater than the favorable effect on consumption. To do this he shows that if the consumption function would shift more than the investment function when money wages were changed we would have an unstable economy. Any increase in wages would lead to an increase in aggregate demand which would lead to a further increase in wages, while any reduction in wages would lead to a contraction in demand and employment and so to a further decline in wages. The economy would be much more explosive than it is actually found to be in real life. This is supposed to prove that the investment function is more responsive to wage movements than the consumption function.

In fact this does not prove the hypothesis (even though it is a very plausible one) because we do not live in a world in which prices are kept down by law. The actual stability which we observe is due not to the relative movements of these functions in response to wage changes but to the effects of movements along the functions from changes in the volume of employment. Professor Slichter seems to leave out altogether the movements *along* the curves which result not from any redistribution between capitalists and workers but from a change in the volume of employment. An increase in employment results in an increase in investment less than the increase in the amount the society wants to save. This results in losses which reduce the amount actually saved to the amount actually invested. The losses pull the economy back towards the equilibrium level of employment.

We have relative stability because the saving function has a greater slope than the investment function. The observed stability has nothing to do with the degree to which the functions themselves would move in response to changes in the rate of money wages.

The rest of Professor Slichter's paper consists of much more general discussions and shows the inconclusiveness which is inherent in the approach. He says, "The fact that technological progress during the last hundred years has meant higher wages to a far greater extent than lower prices indicates that the wage level *in the long run* adjusts itself to the price level more than the price level adjusts itself to the wage level." But this does not seem to be a meaningful distinction. Indeed it would appear to me slightly more reasonable to derive the opposite formulation from the same fact. Professor Slichter's *margin effect* and *timing effect* are very convenient, short expressions and he is quite right in saying there is no reason why timing effects should just offset margin effects so as to prevent business fluctuations. One could go further and ask why they should tend to offset each other at all rather than reinforce each other. The trouble with such concepts is that they are too powerful. They permit one to describe what happens in the course of the business cycle while under the illusion that one is explaining it. Business cycle literature is only too full of such descriptions masquerading as analyses.

One gets a similar impression from the discussion of the effects of strong trade unions on the structure of wages. It is argued that they will tend to diminish the differential between wage rates in different regions and that

this will diminish efficiency by discouraging geographical movement. On the other hand, when trade unions have the opposite effect and "increase the spread between urban and agricultural income," this will again lead to inefficiency because "the disparity limits the expansion of urban industries and therefore their capacity to absorb the surplus population originating on the farms." This is very much like trying to have the argument both ways. It would be equally plausible to reverse the emphasis, stressing the effectiveness of low differentials in encouraging expansion where efficiency is greater and stressing the effectiveness of high differentials in encouraging the mobility of labor to the high efficiency areas. Such a reversed argument would of course be equally invalid.

Professor Slichter is reduced to such extremities only by the unfortunate implications of the original question. The question should be, "What will be the effect of full employment policies on the rate of wages?" Or perhaps better still, "What are the implications for employment policy of strong trade union pressures for higher wages?" Answers to these questions would then reflect one's attitude to employment policy. They would depend on whether, like Pierson and Sweezy, one was for an all-out, full employment policy or whether, like Hart, one has moved into a position of skepticism as to the possibility of establishing quasi-automatic, flexible, compensatory devices on the rate of aggregate spending, or whether, like Professor Slichter, one has practically thrown up the sponge and accepted cyclical fluctuations in aggregate spending almost as natural laws.

My own answer to the main question is, briefly, that in general a rise in wages by itself would have no general effect on employment but would bring with it a general rise in prices. The authorities can prevent the rise in prices only by bringing about a decline in employment. They can do this directly by establishing effective ceilings on prices. The result would be to reduce employment and income to the level where the rate of saving is no greater than the rate of investment still profitable with the new wage-price ratio. Even a small general increase in wages could completely destroy the economy because of the great disinvestment it might call forth in every firm which found its current business made unprofitable by the increased cost which could not be shifted onto higher prices.

The authorities can bring about the same result indirectly by failing to provide the increased money (cash or bank money) that may be needed for carrying on business at the higher price level. This would not be quite as bad because as the level of economic activity diminished some money would be set free to check the further decline by permitting some rise in prices and restoring the margin of profit that is necessary for the smaller volume of business to be carried on. If there is considerable slack in the money supply, prices may be able to rise in proportion to wages, or very near it, without any steps by the authorities to increase the amount of money. Any given wage-price ratio change is just as bad as in the other case. The difference is that there will not be such a great change in the wage-price ratio from any given increase in wages because there will be some increase in prices too.

Professor Slichter is absolutely right in pointing out that if, because of

competitive trade union pressure, wages rise more rapidly than efficiency, we will have either rising prices or serious unemployment. In the past the check on this upward pressure has been the large reserve army of unemployed. Now that we have discovered that unemployment is dispensable, we need some other and more reasonable machinery to take over the function of stabilizing the general wage level. This is our most important unsolved economic problem.

POSTWAR LABOR RELATIONS

PUBLIC POLICY IN LABOR RELATIONS

By William M. Leiserson
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A few years ago postwar planners were busily engaged in proposing and blueprinting model programs of labor relations for use after the war. It was a safe bet then that none of the plans would be adopted, and in the midst of the present labor turmoil little is heard of the model plans for peacetime use.

What the planners generally overlooked was that postwar labor relations policies were largely being determined by what we were doing in handling our wartime labor problems. During the war the government rejected organized labor's contention that basic straight time wage rates must be raised in proportion to the rise in cost of living, in order to maintain the wage earner's relative prewar position. Instead, take-home earnings, increased by overtime and premium pay, were adopted as the measure of labor's relative position. It is hardly surprising, therefore, that the unions should now be demanding wage increases to maintain weekly take-home earnings rather than adjustments in basic rates of pay on the grounds they had customarily advanced.

Thus did the government's wage policy during the war create the issue which labor and management are now fighting out in the big strikes over wages. Similarly, the wartime policy of government fixing of the terms of employment led to the present so-called "fact-finding" boards and the proposal that such boards be authorized by Congress with a thirty-day period during which strikes are prohibited. These government boards will in effect be determining wages and working conditions, although the form will be recommendations rather than directive orders. When the board in the General Motors case recommended $19\frac{1}{2}$ cents and renewal of a maintenance of membership contract, it determined about what will be done in most industries.

Actually the government wanted to get out of the business of wage-fixing and to restore collective bargaining. But because it did not plan ahead for the transition from war to peace, we are now in the midst of the familiar "labor crisis" which usually foreshadows improvisation of a new "labor policy." This crisis was precipitated by the sudden lifting of wage controls after V-J Day. An executive order authorized free bargaining about wages provided no price increases would result from such action. As one labor paper put it: "You can have it, if you can get it—out of profits." Naturally, the unions are contending that their wage demands can be met without raising prices, and they are striking

or threatening to strike for the higher wages. It is plain from official statements that the government wants wages raised. How much is the question. The answer is being sought in the current turmoil of industrial strife and shutdowns.

By authorizing free collective bargaining with the limitation that it shall not result in price increases, the government attempted to allow wages to rise while fighting the battle against inflation by controlling prices. At the same time it sought to prevent deflationary tendencies involved in wage reductions and down grading of workers by making these subject to approval by stabilization authorities. This was far from complete relinquishment of control over wages, but apparently the idea was that genuine collective bargaining could be restored by thus modifying the wage control method. When the outbreak of strikes followed, it soon became evident that the transition from the compulsory labor policies of the war to voluntary adjustment of labor relations was not to be made so easily. Employers began demanding that the government establish a definite wage-price policy to enable them to bargain, and the unions (especially C.I.O.) also urged government action to determine the wage issue.

In a recent report to the members of the Auto Workers Union, the International Secretary of that organization summarized the situation in the following words:

> President Truman has said that wages should be raised and that with few exceptions the increase should be paid out of profits. He wants labor and management to settle the actual amount of the increase through collective bargaining. . . . Labor wants increased wages without any price increases. Industry says no. Because of this, government cannot deny a certain responsibility toward seeing they [wages and living costs] are brought closer together. . . . The government should be firm and unyielding.

Thus are both management and labor pressing the government for what is in effect a continuation of the wartime policy of government wage-setting; and the pressure of general public opinion is in the same direction. If a recent Gallup poll is to be believed, majority sentiment favors forcing strikers back to work and compelling arbitration. Nevertheless, we know that employer and worker representatives on the War Labor Board wanted its control of wages ended so that free collective bargaining could be resumed, and the government was anxious to get rid of the Board for the same reason.

Something like this contradiction between the policy we chose to pursue and what we ended up with also happened during the war. It will be recalled that the War Labor Program did not start out to be a compulsory program with the government fixing details of the labor bargain. The pledge not to strike or lockout was made and the War Labor Board was established by agreement of representatives of labor and industry. This voluntary method, after the manner of collective

bargaining, was proposed and accepted as a substitute for compulsory legislation passed by the House of Representatives and pending in the Senate toward the end of 1941. The compulsory bill was dropped and the War Labor Program was launched shortly after Pearl Harbor as a voluntary method of agreeing on terms of employment in line with the collective bargaining policy of the National Labor Relations Act. By 1943, however, the War Labor Board had the power and the duty to "provide by order the wages and hours and all other terms and conditions (customarily included in collective bargaining agreements) governing the relations of the parties" to labor disputes. President Roosevelt vetoed the Smith-Connally Act which authorized this, but public opinion made it the law.

Do such developments as these mean that we must look forward to some form of compulsory arbitration to determine major provisions of union agreements? There are many who think so. A common view is that when powerful and well-financed national labor organizations are pitted in bargaining against great industrial corporations, the inevitable result is either industrial war or collusion against the consuming public; and, however reluctant the government may be to decide the issues, public opinion will force it to do so. That the current trend is in this direction can hardly be denied. But whether it is more or less inevitable, whether there is no other choice, may well be doubted.

An examination of what we have been doing about our labor relations during the last decade will reveal, I think, that our labor troubles are more largely due to what the government has done, or left undone, to meet crucial industrial situations, than to the power of the unions or the process of collective bargaining. It must not be forgotten that in 1944 while the war was at its height the number of strikes was the greatest on record despite the antistrike provisions and the compulsions of the Smith-Connally Act. Time lost by strikes was relatively low, and it is significant that this was largely due to the fact that most of the strikes were unauthorized, that the unions continued to honor their voluntary no-strike pledge and helped to get strikers back to work quickly. The current labor wars make plain that the record of increasing strikes after the compulsory arbitration law was passed in 1943 was mild compared with what it might have been if the unions had not felt bound by their pledge, and what it is likely to be if government control of the labor contract is continued as a peacetime policy.

When Congress adopted the Wagner Labor Relations Act in 1935, it laid the foundation for a national labor policy that was at once a wage policy and a policy of governing labor relations. It chose to avoid government setting of rates of pay and other details of working contracts. It sought instead to equalize bargaining power between indus-

trial managements and their labor forces, and leave them free to agree on terms by the process of collective bargaining. The statute compels such bargaining but it does not compel agreement. Congress recognized that individual bargaining meant, in effect, management dictation of terms of employment. By eliminating employers' unfair labor practices it tried to establish what the law refers to as "actual liberty of contract," and thus avoid also dictation by government officials. Wages and working rules would be determined by collective agreement and mutual consent.

This policy was adopted not only because equality in bargaining and freedom to organize were desirable ends in themselves, but also because the public interest in industrial peace and justice in labor relations would be furthered by such a policy. This is made plain in section 1 of the Act which recites that the practice of collective bargaining is necessary for the following among other reasons: (1) to remove "certain recognized sources of industrial strife and unrest"; (2) to stabilize competitive wage rates and working conditions between and within industries; (3) to secure "friendly adjustment of industrial disputes arising out of differences as to wages, hours, and working conditions."

Obviously the Labor Relations Act, after it met the test of constitutionality in 1937, did accomplish its immediate aims quite successfully. Labor organizations and union membership multiplied, and the practice of collective bargaining was extended to all the major industries of the country. But why have not the larger ends of reduction of industrial strife and amicable adjustment of labor-management differences been achieved? A clue to the answer may be found in the fact that the first part of the labor relations policy was implemented with an administrative organization to produce the desired results, while the second was left to chance. No effective administrative machinery was provided to promote and to aid in maintaining industrial peace.

The Act merely laid the foundation for a sound labor relations policy. It did not build the superstructure that is necessary to achieve peaceful adjustment of labor controversies and to prevent industrial warfare. It removed the obstructions to labor organization and collective bargaining that employers had built. Insofar as these were the cause of labor strife it provided a method of settling them peacefully by legal procedures to eliminate unfair practices. It also established election machinery for determining by secret ballot disputes as to who is the true representative of the employees for collective bargaining purposes. Although it did not restrict the right to strike, the number arising out of these types of labor controversies has become relatively small, and they now rarely become matters of public concern.

But strikes for other reasons have greatly increased. When new agree-

ments are to be made, and also when disputes arise about the meaning of contracts that are in effect, collective bargaining often ends in disagreement. It might have been anticipated that the growth of unionism and extension of collective contracting which the Labor Relations Act was to bring about would require greatly expanded facilities for government intervention in labor disputes, and that appropriate methods, machinery, and an administrative organization would be needed to induce and assist in continuing peaceful negotiations until all effective means of reaching voluntary agreement have been exhausted. The Act, however, did not deal with the eventuality of collective bargaining ending in disagreement. Congress made no other provision for it, and the government merely announced that the Conciliation Service of the Department of Labor would handle such disputes.

Apparently then Congress did provide ten years ago a fairly definite and comprehensive labor relations policy based on free collective contracting and designed to maintain industrial peace and order. But it neglected to implement the latter part of this policy, and as a result of this neglect a pattern of strike eruptions and labor crises developed, each bringing some hastily improvised, so-called "labor policy." This may explain why we hear again and again that the government needs a definite labor policy, that the lack of such a policy is responsible for the increasing labor strife in recent years. Public opinion, always undiscriminating as to details, blames the Labor Relations Act and its fostering of unions and collective bargaining rather than the lack of the necessary machinery to make its labor peace policy work.

Every period of rising prices or increasing employment opportunities brings an increase in labor disputes. The same is usually true at the beginning of a period of declining prices when employers try to reduce wages or other established labor standards. This is to be expected, for tensions are bound to develop whenever important readjustments in labor relations have to be made. But there is no compelling reason for having a great increase in strikes every time disputes increase. The fact that strikes parallel the movement of labor disputes merely shows that there is no effective machinery for settling disputes before they break out in strikes.

When the National Defense Program got under way in 1939 and work-time lost by strikes doubled over the preceding year, a labor Division was set up in the Office of Production Management to mediate labor disputes, largely duplicating the work of the United States Conciliation Service. By 1941 when the number of strikes and workers involved doubled over the year 1939, another new agency was created by executive order—the National Defense Mediation Board—but the other two were still continued. This Board, despite its name, also arbitrated

and made decisions in the form of recommendations much like a fact-finding board.

It was the Defense Mediation Board that made the original decision recommending that a shipbuilding company agree to include a provision for maintenance of union membership in a collective bargaining agreement. When the company refused to accept the recommendation and the prestige of the Board was threatened, the government took over the operations of the company. Later in the same year when the Board ruled against a closed shop in the captive coal mines, its dissenting members representing the C.I.O. resigned, and that ended the seven months' hectic existence of the Defense Mediation Board. Then the head of the Conciliation Service took a leave of absence to arbitrate the dispute, and he decided in favor of the closed shop, both parties having agreed to abide by his award.

Meanwhile widespread strikes aroused the country, and the House of Representatives passed by a huge majority a bill to restrict the right to strike and to regulate unions. As already indicated, a joint conference of labor and management representatives was convened to head off action on this bill in the Senate. A wartime policy of no strikes and no lockouts was agreed to with a board to be appointed by the President to decide disputes, and shortly after Pearl Harbor the War Labor Board was created. Unlike a similar conference during the first World War, this one did not agree on a set of principles and policies on the basis of which the Board should adjudicate the cases presented to it. The executive order establishing the War Labor Board merely authorized it to make final determinations in labor disputes after efforts of the Conciliation Service to settle them by mediation failed.

This made clear that the new Board was to arbitrate and not confine itself to recommendations, but whether the awards would be compulsory and enforceable or compliance would be merely a moral obligation like the pledge not to strike or lockout was left in doubt. The doubt was presumably resolved in 1943 when the Smith-Connally Act authorized the board to provide by order the terms of labor contracts; but the Attorney General of the United States contended, and the courts upheld the view, that there was no legal compulsion to obey the Board's decisions. The awards were held to be merely advisory, and although the government took over industries if either management or unions refused to abide by them, this was done under the authority it had to protect the war program. No doubt this was a sound legal distinction, but to workers and employers it meant compulsion either way. And the strike situation continued to get worse after 1943.

To the War Labor Board's duties of arbitrating disputes was added the responsibility of administering the wage stabilization program. This

required Board approval of wage changes to make sure that increases beyond the standards set in the stabilization orders were not granted. Thus workers who brought disputes to the Board could have their wages raised to the amount allowable under the Little Steel Formula or to correct substandard rates of pay. In addition, employers who desired to raise wages of their employees could petition the Board for approval of similar adjustments. But if employers did not petition and their employees did not create a dispute referable to the Board, the employees had no way of getting approval of allowable wage adjustments.

This had two effects. It stimulated labor disputes, and it left those workers who did not or could not contest their employer's refusal to petition for approval of wage adjustments without the benefits of the stabilization policy. This made it possible for a high official of the government to take to the radio and defend the Little Steel Formula against efforts of unions to have it revised upward by pointing out that many employees, especially unorganized white collar employees, had not even had their wages raised up to the 15 per cent that the formula allowed.

Under these conditions, the frequent and urgent attempts of the War Labor Board to induce labor and management to settle more of their differences by collective bargaining proved futile. When some of them did agree, it was often necessary to set aside or modify the agreements because they did not conform to the stabilization policy. Combining the functions of wage stabilization and settlement of labor disputes in one Board all but eliminated free collective bargaining, although the two functions did not necessarily have to be so combined.

But we drifted into the policy of combining dispute settlement with stabilization just as we did into compulsory government arbitration because we had built no organization with appropriate administrative organs to achieve the ends of reduced industrial strife and amicable labor adjustments for which the Labor Relations Act laid the basis. Our present state of industrial war is largely due to government efforts to impose terms of employment while it attempts at the same time to encourage the practice of collective bargaining.

The fact that new national boards have to be called into existence whenever serious labor disputes arise and the fact that the President himself must from time to time become involved in mediating and arbitrating the controversies, make clearly evident the need for a permanent organization to make the national collective bargaining policy work to the ends of industrial peace, as it was intended to do. In the Railway Labor Act Congress did provide the organization and machinery necessary to accomplish this purpose when it made collective bargaining the official policy by legally protecting workers' organizing

and bargaining rights. The result has been that since 1926, when the Act was adopted, rail transportation has continued with only minor interruptions through all the years when other industries were settling their labor disputes by industrial wars.

The detailed provisions of the Railway Act are not applicable to all industries, but its principles and methods and its organization of agencies for settling various types of labor disputes so as to make strikes unnecessary are essential to any systematic plan for avoiding labor warfare by providing peaceful methods of adjustment.

The basic principle is that main reliance for maintaining peace must be placed on mediation, not on arbitration or so-called "fact-finding" or other devices that are sometimes used. All these are valuable aids at times as supplementary measures, but if the mediation system is not adequate to settle peacefully the vast majority of disputes, industrial warfare will remain a serious problem. Without such a system, arbitration and the other methods can do little to prevent strikes. Mediation is but a continuation of free collective bargaining with the aid of a mutual friend of both parties. Arbitration and the other methods involve passing judgment on the merits of issues in controversy, and neither management nor labor wants this done by the government or any other third party if a test of strength is likely to resolve the issues in their favor.

But if some of the issues are settled in mediation and the parties are brought closer together on the rest, then what remains may not be worth the cost of a strike, and arbitration or recommended decisions are frequently welcomed. Mediation proceedings must be directed to bring the parties to this state of mind if agreement by the parties themselves cannot be secured. And at this point the duties of the mediator or mediation board must end. They must not arbitrate or otherwise pass judgment on the issues, for they are likely to destroy their future usefulness as mutual friends by deciding in favor of one party or the other. Arbitration and making decisions are duties to be assigned to other agencies supplementary to the mediation organization.

This should make plain another fundamental principle: the government program for peaceful adjustment of labor disagreements must be organized as a continuing process, beginning with joint negotiations of the parties themselves, passing on to mediation, then to efforts to induce arbitration, then either to agreed-upon arbitration procedures or, if either party refuses to arbitrate, to public investigations with recommended decisions. Integrated with this process also must be adjudication of disputes arising out of the meaning or application of existing agreements.

The importance of such an organized process cannot be overempha-

sized. It differentiates the functions of the various kinds of boards or agencies that may be necessary to bring disputes to a peaceful conclusion, and it provides connecting links at the different places where negotiations commonly break off and strikes seem necessary. The links make plain that the break is only temporary, that there are more procedures ahead for peaceful settlements.

Labor disputes are not all of a kind, and our failure to settle so many of them without strikes is due to the notion that the same kind of a board can deal with any dispute. Types of disputes need to be differentiated, and agencies equipped with appropriate methods and policies for dealing with each type must be available. The bill now pending in Congress to establish fact-finding boards is an example of how a device that can be useful toward the end of the process of dealing with disputes—and then in emergencies only—is assumed to be capable of dealing with any kind of a controversy. Labor strife has often been intensified rather than reduced when government agencies have applied methods appropriate for one type of dispute to others for which they are not suited.

If a permanent organization is to be established, adequate to maintain industrial peace and reduce strikes to a minimum, it must be built around a federal mediation or conciliation board. This must be the main agency with primary responsibility to intervene in disputes early enough to prevent strikes. It must be the top board just as the War Labor Board was during the war. At present the United States Conciliation Service is a subordinate agency which is not expected to deal with major disputes. For these, national figures are called in on temporary assignments. They are more or less volunteers to help put out industrial conflagrations. Such national figures need to be permanently on the mediation board to which the nation can look to prevent the fires, and always be prepared to put out quickly those that do occur to keep them from spreading.

Such a board will need a nation-wide organization of regional offices with a staff to keep in touch with developing disputes in all parts of the country and to conduct mediation proceedings locally. When these fail to bring agreement, they would go to supervising mediators and ultimately to the board members. The board itself and not individual mediators would determine when further mediation would be useless and when to begin the procedures for inducing the parties to arbitrate. If agreements to arbitrate dispose of the dispute, the parties should be free to select their own arbitrators but not any of the mediators, although the board might recommend experienced arbitrators from an approved panel.

In addition to the federal mediation board, a series of adjustment

boards will be needed, one in each region and one in Washington to decide disputes involving interpretation or application of collective bargaining agreements. These should be composed of members nominated by management and labor organizations with a neutral chairman. The boards must always be available, although its members need not serve on a full-time basis. The same boards may be authorized also to arbitrate disputes about new agreements, or changes in agreements, if mediation has failed to settle them, and the parties prefer arbitration by an adjustment board rather than set up a board of their own.

If either party refuses to arbitrate, as it must have the right to do, the complainant might feel that the issue is not worth a strike or lockout, and the case would end there. But if steps are taken to stop production and a strike or lockout is really imminent and would seriously affect the public, then and only then the final agency in the process of handling disputes comes into play. This is an *ad hoc* board that may be appointed by the chairman of the mediation board or by the Secretary of Labor (preferably not by the President) to investigate the merits of the controversy and to make recommendations for a just settlement.

Such boards have become known as fact-finding boards, but this is a misnomer. They are really arbitration boards who hear the parties, decide the issues, and publish the facts to support their decisions, but these are treated as recommendations, not awards binding on the parties. Pressure of public opinion is relied on to secure compliance, a process which makes it essential to center public attention on the awards and not on the facts, as these might well lead people to draw different conclusions from those of the board. Also, unless the number of such boards is strictly limited, the many decisions scatter the attention of the public and the expected pressure does not materialize.

In order to make all this machinery operate effectively in a continuous process, it is necessary that labor and management alike assume certain obligations and responsibilities. The way to this is prepared by the negative provision in the Labor Relations Act that employers shall not refuse to bargain collectively. This needs to be translated into a positive duty of employers and managers, workers and unions to exert every reasonable effort to make and maintain collective bargaining agreements and to try in good faith to settle all disputes, whatever their nature, in joint conferences of their authorized representatives. In addition, there must be the duty to notify the mediation board of pending disputes and to participate in the appropriate procedures. And, most important, is the obligation to maintain the *status quo* while the machinery for peaceful settlement is operating. Management must not change any condition out of which a dispute arises, and workers or unions must take no action to force such change while conferences are being held and

pending the outcome of government efforts at settlement.

Such obligations immediately raise the question: How will they be enforced? It will be noted that the process outlined above and the agencies involved in its operation require the government to act either as a mutual friend or judge. In mediation it is a friend; when it arbitrates or recommends decisions, it is a judge. The question is: Shall it also act as a policeman in connection with the adjustment of differences about wages and other terms of the labor contract?

There are a number of bills pending in Congress, several of which, if combined, would provide the complete machinery for promoting peaceful settlement of disputes as here outlined. But in response to insistent demand that a law be passed with teeth in it, most of the bills have provisions for government policing of the process of negotiating working contracts and settling differences about terms. We tried this with the Smith-Connally Act. It restricted the right to strike, provided what is alleged to be a cooling off period, authorized damage suits and in some cases criminal prosecution. But the result was more labor strife and work stoppages, and this in spite of the strong feeling among all elements of the population that war production should not be stopped. There is ample evidence also in the experience of the countries that have tried compulsory arbitration that attempts to enforce by legal suits and penalties such obligations as are necessary to make mediation and arbitration effective are futile and undesirable.

Only a more or less complete dictatorship can make that policy work. As a British public official has well said: "A democratic government must be careful not to expose its own impotence." Better results are secured when mediation authorities press and insist upon voluntary assumption of the obligations necessary to successful operation of the agencies for maintaining peace and order in industry. In any statute providing such machinery it is well to specify the duties and responsibilities of the parties in mediation and arbitration proceedings, but they need to be treated as moral obligations and not legal compulsions.

Until we have effectively organized such machinery and see what it can accomplish with the government acting only as friend or judge, it certainly would be wiser not to complicate labor controversies about the terms on which people will work by legal restrictions and penalties.

COLLECTIVE BARGAINING IN THE PUBLIC SERVICE

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The problem of satisfactory employer-employee relations in the public service arises at all levels of government. The field is to a large extent still unexplored. No attempt has as yet been made to analyze on a broad basis the various laws, ordinances, rules, and practices of personnel policy in federal, state, and local government which deal with employee relations. A wealth of information is waiting to be extricated.

This paper confines itself to only one aspect of employee relations; namely, to the problem of organized dealings between public officials and administrators on the one hand and unions of public employees on the other. This question first attracted considerable attention at the close of World War I. The great advance of labor organizations in private industry prompted a similar growth of unionization in the public service, affecting for the first time not only employees in the skilled trades but clerical and administrative personnel of what used to be called "governmental service" proper.

Extensive discussions were then carried on as to the wisdom and practicability of employees' organizations in public administration.[1]

In the intervening period, astonishingly little progress has been made in contrast to the stormy and rapid development of labor-management co-operation in private industry. The evolution of co-operative policies in public employment has been slow and is still looked upon by many with great apprehension. Many public officials attach to government certain characteristics which—so they claim—call for a personnel policy basically different from that in private industry.

Faced with increasing demands for collective bargaining, public officials are in a quandary. Some consistently and determinedly oppose any attempt of their employees to organize. There are many "prohibited territories" in federal, state, and local government where public employees dare not organize.

Just a few days ago, on January 21, 1946, the Governor of Virginia sent this message to the legislature:

> A labor union . . . is now attempting to unionize some of the employees of the City of Richmond and conduct collective bargaining negotiations with the city authorities. Such action is clearly contrary to Virginia's established public policy. . . . Unionization of the public service diverts the loyalty, allegiance, and obligations of the employee from the people and their government, which are entitled to them, to the union. . . . Such an intolerable situation is utterly incompatible with sound and orderly government. It constitutes a threat to state sovereignty. . . .

[1] See *Congressional Record*, 66th Cong., 2nd sess., V. 59, Parts 4 and 5, Mar., 1918; Sterling D. Spero, *The Labor Movement in the Government Industry* (New York, 1924); Ordway Tead, "Trade Unionsim in the Civil Service," *The Public*, Aug. 24, 1918, pp. 1074–1076; Charles A. Beard, "A Governmental Employment Policy," *Good Government*, Jan., 1919, pp. 11–18.

I therefore recommend that the General Assembly adopt a joint resolution declaring unionization of employees of the State or any agency or political subdivision thereof to be contrary to and in violation of its public policy, and that it is beyond the power of authority of any public officer to recognize or negotiate with any such union or its representatives with respect to any matter relating to government employees or their service. . . .

Other public officials, while not interfering with unionization of their employees, refuse firmly to meet and bargain collectively with designated representatives of employees. In contrast, a few public administrators have gone all the way in collective bargaining up to the point of signing closed shop agreements with unions of public employees.

The present chaos cannot last. The very bigness of government and the change in its functions, the growth of unionization, and the economic plight of public employees, as well as the paradox of hierarchic autocracy in the administration of a democratic republic, combine to press for the application of democratic personnel procedures in the public service.

Government today is like a big corporation composed of a few powerful top officials and a vast number of lesser employees. It has entered into every field of social and economic activity, and composition as well as outlook of the administrative machinery does not differ greatly from the labor force in private employment. Individual bargaining has become impossible or extremely difficult. Public administrators and legislators rely on information supplied to them by personnel bureaus and department heads. There is nothing in that process to suggest that such information will by necessity be fair, just, and free from prejudice and ignorance.

The economic plight of public employees is serious indeed. Federal employees had no change in their basic rates of pay until the adjustment made by the Federal Employees Pay Act of 1945 which was the first general increase in pay rates of federal employees since passage of the Classification Act of 1923.

State employees have generally fared even worse. Such general adjustments as have been made are frequently limited to one or two years or to the duration of the war, without regard for the possibility that the cost of living might stay where it is now or rise even further.

In cities and counties average wage adjustments during the past emergency have been considerably less than the adjustments allowed in private industry under the Little Steel Formula.

A great number of public employees receive remuneration far below the most modest concept of a living wage. In some jurisdictions they are paid less than the minimum which their own department of welfare allows for needy families.

The assumption that in turn for inferior pay public employees enjoy greater security is not borne out by facts. A substantial portion of public employees are without security in their employment and without

protection against old age, accidents, and unemployment. Furthermore, even under civil service rules and regulations, arbitrary and discriminatory dismissals, fines, suspensions without pay or disciplinary transfers and promotions are by no means exceptional.

The government is no model employer. The argument that unionization of public employees is unnecessary because government does not work for profit and is, therefore, not interested in exploitation, has been thoroughly discredited. Nor is there reason to fear that unions in public service will co-operate with public administrators in a policy of restricted or poor service at high cost to the public. To improve their chances for re-election public officials will sometimes compete with the most backward employer in order to sell themselves to the voters.

Assuming then that public employees' unions have their rightful and legitimate place within public administration, it remains to discuss the possible boundaries of collective dealing between public administrators and unions, and which, if any, of the general objectives and practices of labor organizations are undesirable or irreconcilable with the duties and performances of public employees. In industry we have come to recognize that the right to organize involves: (a) the right of employees to bargain collectively; (b) the right to exercise economic and political pressure; (c) the right to refuse to work with unorganized employees (closed shop).

Each of these rights has been at some time under serious dispute, and their present recognition represents the end result of a long evolution in the hearts and minds of legislators, the courts, and the public. The road we have traveled can best be seen in the changed position of the United States Supreme Court. From a rigid protection of the "open shop," which went so far as to declare unconstitutional federal and state legislation trying to forbid discharge of workers for union affiliation,[2] and to outlaw the "yellow dog" contract, respectively,[3] the Supreme Court has changed to a position where it will protect to the limit the right of workers to organize against any attempts of interference by state legislatures or state courts.

In public employment none of the rights mentioned above is as yet beyond dispute. Most important of all, the right to bargain collectively has not yet found universal or even major acceptance. Opposition to collective bargaining was most forcefully formulated in a report published a few years ago by the National Institute of Municipal Law Officers. The report, which has found undeserved attention and support by public administrators, denies the power of municipalities to bargain collectively and to enter into labor union contracts.

While it is true that the National Labor Relations Act excludes public

[2] *Adair* v. *U.S.*, 208 U.S. 161, 28 Sup. Ct. 277 (1908).
[3] *Coppage* v. *Kansas*, 236 U.S. I, 35 Sup. Ct. 240 (1916).

employees from its coverage, the conclusion that collective bargaining in public employment is, therefore, illegal is utterly fallacious.[4] The NLRA has not legalized collective bargaining. Long before the Act was passed, collective bargaining between employers and labor organizations had been going on, and the legality of such agreements was never doubted. Workers have been able to recover damages under collective bargaining contracts as "third party beneficiaries," and the courts have granted injunctions to either employers or unions to compel observance of collective agreements.[5] The purpose of the NLRA was not to legalize collective bargaining but to protect it by outlawing certain types of unfair labor practices which had assumed serious proportions and which were threatening the free flow of commerce. Laws are the expression of what Justice Holmes called, "the felt necessities of the time," and rightly or wrongly, Congress saw no need when the NLRA was passed of extending similar protection to federal employees.[6]

If public agencies should continue to deny to their employees the right to organize and to bargain collectively, if public administrators continue to run the public service according to an outmoded idea of a master-and-servant relationship, demands for legislative actions will no doubt become more accentuated.[7]

No less fallacious is the assumption of the Municipal Law Officers' report that municipalities need specific constitutional authority for the purpose of collective bargaining. While the relations of local units of government to the states are those of subordinates and superiors, counties and cities have such powers as are given to them expressly or as may be reasonably implied. Were it otherwise, cities and counties would immediately have to stop the major part of their day-by-day operations for which no specific constitutional provision has been made. Every city or county has the right to conclude individual contracts to perform its obligations. Public officials may contract the service of an entrepreneur for a period of several years, settling both the price for material and the price for labor. Or they may make individual contracts of employment running over a period of several years. Why then should a city or county need specific constitutional authority for

[4] *Power of Municipalities to Enter into Labor Union Contracts* (Washington: National Institute of Municipal Law Officers, 1941), p. 23.

[5] John R. Commons and John B. Andrews, *Principles of Labor Legislation* (New York: Harper & Bros., 1936), footnotes 50, 51, p. 390.

[6] For similar reasons most state labor relations acts have excluded in whole or in part state and local government employees.

[7] The 1945 session of the Illinois Legislature passed Bill S.B. 427, which gave inclusive permission to the state, public corporations, and all subdivisions of the state to bargain in good faith and to enter into collective bargaining agreements with employees' representatives. The bill passed by both houses was vetoed by the governor. Similar bills were introduced but not passed: Indiana H-111, Minnesota H-337, New York S-395, Oregon S-56, Utah H-69, and Washington H-59.

doing collectively—through bargaining with union representatives—what it is unquestionably entitled to do in an individual contract of employment? Whatever lies in the discretionary power of an administrator, whatever a city or county is empowered to do in an individual contract of employment, it is entitled to do in a collective agreement.[8] Bargaining collectively does not constitute the exercise of additional powers not previously possessed by cities or counties. It binds the authority for the duration of the collective agreement no more and no less than any individual contract of employment would bind the authority if concluded for a certain period of time.

While the legality of collective bargaining in the public service is still being debated, hundreds of units of government are actively engaged in it. Collective contracts have been entered into by such federal agencies as the War and Navy Departments, the Alaskan Railroad, Federal Works Administration, Federal Barge Lines, National Labor Relations Board, Maritime Commission, Securities and Exchange Commission, National Housing Administration, Reconstruction Finance Corporation, and Tennessee Valley Authority. The Bureau of Labor Statistics reported in its file in October, 1945, three agreements with federal agencies; three contracts signed by state governments; forty-nine agreements with municipal governments; seven, with county governments; three, with village governments; and one, with the governing body of a township. This count is merely a tabulation of agreements on file in the Labor Department, and does not constitute a complete record of all agreements which exist in the field of public employment. One public employees' union, the American Federation of State, County, and Municipal Employees, has in its file 104 collective agreements, covering employees in proprietary functions as well as employees in governmental functions.[9]

So far, none of the horrible consequences feared and prophesied have materialized. In the words of Ziskind, collective bargaining "has caused no shaking of the foundations of the state, no diminution of respect for law, no dictation by a minority group, no domination by selfish interests. On the contrary, there has resulted a sense of responsibility for the employment relationship, a reaffirmation of the representative character of government, and a belief in the fairness and justice of the state."[10]

Organized employer-employee relationships culminating in the signing of collective contracts are, however, not the only type of collective

[8] *Opinions of the Attorney General* (Wisconsin, 1938), Vol. XXVII, p. 32.

[9] A. E. Garey, "Public Employee Union Contracts," *Journal of State and Local Government Employees*, Sept., 1945, pp. 3–4.

[10] David Ziskind, *One Thousand Strikes of Government Employees* (New York: Columbia University Press, 1940), pp. 198–199.

bargaining in the public service. Often public administrators will negotiate an agreement on conditions of work with representatives of organized employees but will prefer to incorporate the agreement reached in existing laws, rules, or regulations of personnel policies and procedures. Such an example of collective bargaining is furnished by the state of Wisconsin. Since 1943 union representatives from the various jurisdictions have met quarterly with civil service authorities in joint employer-employee conferences. At these meetings any question concerning employment conditions and operation of the service is discussed in an atmosphere of mutual trust and co-operation. On questions which are not for the civil service authorities but for the state legislature to decide the conference seeks an understanding with the view of uniform recommendations to the legislature. Minutes are kept of the decisions reached by the conference which constitute what might be called an "informal collective agreement." So far, the civil service authorities have not failed to carry out the agreements to the letter. The joint state-wide and all-inclusive employer-employee conferences are supplemented by joint conferences on a departmental level—composed of superintendents and the director of public welfare and union representatives of all institutions—and by labor-management committees in various agencies or institutions composed of the immediate departmental head and union representatives. An outstanding illustration of the latter type was the Wisconsin Civil Service Employees Joint Council established at the University of Wisconsin.[11] The constitution worked out jointly by representatives of the University Board of Regents and of the Wisconsin State Employees Association, an affiliate of the American Federation of State, County, and Municipal Employees (A.F.L.), lists the following functions of the council:

1. To consider ways and means of improving the service rendered by the civil service employees of the university.
2. To consider methods and measures through which employment conditions can be improved, and at the same time the efficiency of the service increased.
3. To promote a spirit of co-operation among the several groups of civil service employees and between the employing officers, faculty, and the employees of the university.
4. To provide a medium for the exchange of information relating to the problems of the staff and those of the employing officers so as to bring together the varying experience and different points of view of all interested groups.
5. To draft and recommend for adoption uniform university personnel policies with regard to salary increases, promotions, vacations, leaves

[11] The council, temporarily suspended by the impact of the war, is now being revived.

of absence without pay, sick leaves, seniority, service ratings, in-service training, demotions, discharges, reductions in pay, suspensions, and other matters affecting university personnel.

6. To secure for the civil service personnel a greater share in and responsibility for the determination and observance of the conditions under which their duties are carried out.
7. To make recommendations to the president and other administrative officers of the university relating to any of the matters within the functions of the council.

Many other effective policies of organized employer-employee cooperation are in force but cannot be gone into in this paper for the lack of space. Almost without exception such policies have resulted in improvement of employee morale and attitudes of civil service administrators and other public officials. Increased efficiency of the service inevitably followed.

Recognition as Sole Bargaining Unit. Special objections have been raised (even by public officials who otherwise recognize the legitimacy of a public official to enter into labor union contracts) to the recognition of a labor organization as the sole bargaining agency for all employees. Such recognition has frequently been called unconstitutional because it violates "due process" and "equal protection." This argument overlooks two important considerations: (1) recognition of a union as sole bargaining agency does not prevent any employee, organized or unorganized, from presenting his grievances directly to his superiors; (2) our Supreme Court has found no fault with the constitutional legality of Section 9 of the National Labor Relations Act, which regulates the procedure for the designation of a union as the exclusive representative of all the employees.

Recognition of one union as the sole bargaining agency is beneficial to both employers and employees. Its purpose is to prevent difficulties which may arise if two or more organizations claim to speak for the same group of employees. It eliminates frictions, constant rivalry and unrest, and, therefore, contributes to increased efficiency. It has been accepted for this reason by the TVA and a few other state and local government agencies.[12]

Reeves and David in their recommendations for the President's committee on administrative management favored that such recognition be incorporated in a federal employee relationship policy.[13] The problem is not yet a serious one in view of the small extent of interunion rivalries which have so far occurred. The two major organizations of

[12] City Council of Reading, Pennsylvania; Detroit Street Railway Commission, Highland Park, Michigan.

[13] Floyd W. Reeves and Paul T. David, *Personnel Administration in the Federal Service* (Washington: U. S. Government Printing Office, 1937), pp. 54–55.

labor, A.F.L. and C.I.O., have both been careful to solve interunion conflicts peaceably without antagonizing either the public or public administrators. For example, recently the employees of the United States Employment Service in Colorado wanted to organize. Some preferred the American Federation of Labor; others, the C.I.O. Both unions consented to a vote being taken among all employees. The balloting was done by mail and supervised by the International Association of Public Employment Services. Both unions agreed in advance that the losing union would withdraw from all organization activity for at least one year.

With the growth of unionization in the public service jurisdictional disputes are likely to increase, and unless machinery is established to handle such situations, serious conflicts affecting the smooth running of the administrative machinery are likely to occur. There is no reason why machinery similar to that available in private employment through Section 9 of the National Labor Relations Act could not be applied to solve interunion disputes in public employment.

Employer-employee co-operation in the public service while comparatively rare in this country is common in many countries abroad. Notable is the application of collective bargaining to the public service in Great Britain. During the first World War the government promoted Whitley Councils in industry, composed of an equal number of representatives of labor and management, for the purpose of recommending policies on wages and other working conditions and of settling disputes without resort to strikes and lockouts. Applying the same principle to the public service the government established: (a) a national Whitley Council for the administrative and legal departments of the civil service; (b) government departmental industrial councils and government Trade Joint Councils for government industrial establishments; (c) Whitley Councils for the local government service.

In industry, Whitley Councils did not prove very successful. In the civil service and in local government they have developed very well and acquired great importance. In January, 1945, the number of local authorities who had adopted the Whitley plan totaled more than 1,025, covering three-fourths of all local government employees. Through the instrumentality of the Wages Councils Act the standards of service and pay arrived at in joint negotiations between representatives of public officials and public employees—the latter may be public employees or employees of a labor organization—become part of the recognized terms and conditions of employment of all local government employees and are then legally binding and enforcible against any local authority in the country whether or not the local authority has become a member of the Whitley Council.

Discussions are now under way for the adoption of uniform standards

of service (i.e., minimum qualifications of recruitment and training) and uniform conditions of service (i.e., minimum salaries, working hours, holidays, sick leave, etc.).

Whatever the outcome of the present discussions within the national Whitley Council, the conclusion is inescapable that collective bargaining in the public service in Great Britain has attained a status and scope far beyond anything hitherto attained in this country.

Political and Economic Pressure. Unions of public employees use all legitimate channels to support their programs. Their representatives appear before legislative bodies or legislative committees whose members will in turn frequently seek their advice on questions of personnel policy. Where the power to regulate personnel matters rests with administrative or quasi-administrative authorities, legislative representation will take place before these bodies. In view of the fact that government is the immediate "boss," it is not surprising that unions of public employees use legislative tactics possibly to a larger extent than unions in private industry. There should be no objection to such lobbying. Reduced to simple terms, its object is to bring the facts as the union sees them to the attention of legislators and administrators.

Most public employees' unions are affiliated with national bodies of labor (A.F.L. and C.I.O.). Their support is sought and has often proved decisive in getting favorable legislation passed.

Seldom are public employee unions engaged in direct political campaigning. Indirect political action, however, is common. It consists mainly in presenting to the membership and to the public the voting record of members of legislatures. Occasionally a union might sample the views of legislators—or of candidates for a political office—toward pending legislation affecting public employees, and give widest publicity to the answers received.

Labor's foremost economic weapon, the strike, is condemned to insignificance in the public service. Only sporadically have public employees resorted to strikes. All unions of federal employees have outlawed strikes in their constitutions. Unions in the state and local government service, while not expressly banning the strike, have similarly indicated that they would seek their objectives primarily by petitioning, co-operating with state and local officials, and by promoting legislation.

Such strikes as do occur are often carried out by unorganized groups of employees,[14] or without the consent and against the advice of the union in question, or they are the result of a serious emergency which left employees as well as the union with hardly any other choice.[15]

[14] Gordon R. Clapp, *Employee Relations in the Public Service* (Chicago: Civil Service Assembly, 1942), p. 116.

[15] Two recent strikes of public employees in the Midwest were typical of the serious position in which public employees may find themselves as the result of arbitrary action, buck passing, lack of arbitration machinery. For details on these two strikes see: A. S. Zander, "Milwaukee

It is unthinkable that the strike weapon should be used in jurisdictions which have established machinery for the settlement of grievances and disputes. Unfortunately, a great number of public agencies have made no provision whatsoever for adjustment of grievances, and most civil service laws or ordinances are silent on that matter.[16] Often the head of a bureau or department is the accuser, judge, and executioner, all in one.

The Tennessee Valley Authority is testimony to the contention that satisfactory employer-employee relations will reduce the use of the strike weapon to insignificance. In eight years there were only four strikes in the TVA. The longest strike lasted from three days to one week at the various projects and was in the nature of a jurisdictional dispute between two craft unions. One strike (lasting three and one-half days) was caused by interracial antagonism, and two other strikes were due to misunderstandings and lasted forty-eight hours and forty minutes, respectively.[17]

We should not declare strikes in public employment illegal simply because we are convinced that they are fraught with danger to the public welfare. Strikes in transportation and food production can be more harmful than strikes of park employees or of employees in a public fish hatchery. A strike of employees of waterworks has serious implications regardless of whether the water works is owned privately or by the city. Each case will have to be judged on its own merits. No law can prevent strikes if such action is the only means of preventing serious injury to a person or a group of persons.

The Closed Shop. Most public officials, economists and lawyers, legislators, and the courts in the few cases which have arisen,[18] seem to be agreed that the closed shop has no place in public employment, that it is undesirable and illegal. Unions of public employees, too, have given no indications that they want the closed shop to become a standard provision of all collective agreements. The subject is therefore of more or less academic importance. Only sporadically have public authorities signed collective agreements which provide that only members of the contracting union may be hired (closed shop) or that all employees hired be compelled to make application for membership in the union within a certain prescribed period (union shop).[19] There is no reason to doubt the

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Employees Victorious," *Journal of State and Local Government Employees*, Jan., 1944, p. 7, and "AFSC&ME Triumphs in Indianapolis Strike," *Journal of State and Local Government Employees*, July, 1945, pp. 5–6.

16 Phillips Bradley, "City Hall, Strikes, and Collective Bargaining," *Good Government*, May-June, 1943, p. 29.

17 Herman Finer, *The T.V.A.—Lessons for International Application* (Montreal: International Labour Office, 1944), pp. 165–166.

18 *Circuit Court of Illinois in Chapin* v. *Board of Ed. of Peoria*, 5 *Municipal Law Journal* 24.72, & *In Petrucci* v. *Hogan* (27 N Y S 2nd 718, 1941).

19 See Serial No. R. 1552 Bureau of Labor Statistics Bulletin on *Union Agreements with Municipalities*, which report 11 union agreements containing a union shop clause.

legality of such contracts. The United States Supreme Court has recognized the moral and economic justification of the closed shop, and so has Congress, although indirectly, in Section 8, Paragraph 3, of the National Labor Relations Act. Difficulties may certainly arise in jurisdictions where civil service regulations list exhaustively the conditions of hiring and firing. However, any legislature could legitimately amend such regulations if it desires to do so in order to authorize the closed shop clause.

There will be no need for a closed shop in public employment if sincere employer-employee co-operation is substituted for opposition to unionization and collective bargaining. Basically the closed shop is a defensive weapon. It is of importance where management is still trying to destroy labor organizations with whatever help it is able to muster from among the employees. Where mature employer-employee relationships prevail, the closed shop is of minor significance. In Great Britain where the process of collective bargaining was accepted by management a few decades ago, the closed shop has never been an issue, nor has it been in some industries in our own country where management and labor can look back to a long period of uninterrupted contractual relationship.

Conclusions. The desire of public employees to organize and to bargain collectively is no conspiracy and no infringement upon public authority, nor is it incompatible with the faithful performance of their duties and their unstinted loyalty. Three to four million public employees cannot be reduced to the status of peonage. Whatever authority or power they might have, they perform service for income.

Unionization and collective bargaining have become desirable objectives of national policy. Both were formerly thought of as disturbing to our social and economic life. Today the general attitude has changed. We are now convinced that unionization and collective bargaining are beneficial and that their good effects outweigh whatever bad effects they might have in certain periods or in certain specialized circumstances.

The denial of such rights to public employees does not promote efficiency nor the smooth functioning of the public service; it leads to defiant attitudes and "is a blow at the conditions of a free society."[20]

No collective bargaining is feasible in the authoritarian state. Fascist Italy prohibited public employees' unions. Nazi Germany substituted a fiduciary relationship—service and fidelity to the Fuehrer and the Reich—for the system of joint consultation and co-operation in existence during the Weimar Republic. Such policies are unworthy of a free and democratic society whose tools are respect for human rights, willingness to compromise, and persuasion.

[20] Arthur W. MacMahon, "Collective Labor Action in City Government," *Public Management*, Nov., 1941, p. 328.

Every collective contract is essentially a peace instrument. It establishes a partnership in which strikes or any violence have no place. It calls for established channels to air grievances, fair system of merits, and co-operation and consultation with employees' representatives in all questions of personal policy.

The idea that government has absolute powers and rights which must not be questioned is an absolutist doctrine which has no place in a democratic society.

Satisfactory employer-employee relationship is no one-way traffic lane but will benefit the public service and the taxpayer. It is an essential condition for the attainment of better public service. Public employees' organizations have never confined their interest to pay checks alone. They have always fought for efficient and clean government, and no small part of union strength is devoted to freeing public employees from being tools of political administrations.

The time has come to recognize collective bargaining in the public service as a vital part of healthy and democratic administration policies.

DEMOCRACY IN TRADE UNIONS[1]

By PHILIP TAFT
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It is my intention to deal with democracy within unions and to avoid a discussion of problems of admission and discrimination, as the latter present special considerations which require lengthy and independent treatment.

Repeatedly the charge is made—and certainly not without foundation—that many trade union organizations are run undemocratically by their officers. First, it will be worth while to examine the peculiarities of trade union administrative problems that bring this situation about and how serious the situation is for the average member of the trade union. Second, we should see if the popular demand that government ought to regulate unions as it does other industries affected with the public interest is the answer to the problem.

Essentially, a labor union is organized to promote the economic interests of its members. As the union's power to gain its ends depends upon its ability to weld its members into a unified whole, so far as economic action is concerned, it must be equipped with means to reduce to impotence any divisive influences that appear. Moreover, extensive power must be delegated to officers if many necessary functions are to be carried on with respect to economic action as distinct from struggle for office within the union. Officers must be given wide powers when dealing with employers, as a mass meeting is scarcely the proper atmosphere for negotiating a contract involving many detailed issues of management-labor relations or even for the settlement of minor grievances.

Agreement making has been characterized by Professor McCabe as the writing of a treaty between two economic powers. Consequently it is not possible nor desirable to insist that demands formulated by the membership must be rigorously followed. Unless union officers and union committees are allowed some area in which they can exercise their discretion, they cease to be representatives and become mere messengers. Serious limitation of the discretion of bargaining representatives would impose severe difficulties upon collective bargaining conferences, and would lead to a refusal by employers to make advance commitments. Union officers are as a rule experienced in negotiation, and they are in a better position than their members to appraise realistically the firm's ability to pay, its position in the industry, and general economic conditions, and are more likely to be more conversant than their members with industry and area practices. As specialists in bargaining they are

[1] I am indebted to Professors D. A. McCabe and Selig Perlman for a number of very helpful suggestions. The writer is, however, solely responsible for all views expressed.

likely to be better equipped to judge the possibilities of attaining given demands. Moreover, not being directly involved in the sense that they are suffering from grievances or low pay, full-time—as distinct from part-time or nonpaid—officers may be more objective and more ready to recognize economic realities.

The need for placing authority in the hands of union officers also arises from another source. A union is made up of districts and locals, each division subordinate to the other, and all to the general organization. The national organization must be given authority to protect the national citizenship of members. Included is the necessity for insisting that national working rules and policies be obeyed. Wide delegation of power between conventions must therefore be necessary—power to enforce the rules, to protect the organization, to appoint agents, and to spend the funds of the union. Delegated power may however, tempt officers to use power to perpetuate themselves in office.

For example, general policies may have been elaborated at conventions which some locals may refuse to accept. These may be due to an influx of new members, unhabituated to the discipline imposed by the union, or because of opposition to the policies accepted by the majority. For its own protection the union must be able to impose the general will upon its subordinate branches. Some local groups may oppose the rule of the union that certain procedures be exhausted before a strike is called; the general organization may insist that its subordinate branches incorporate certain provisions in its contracts with employers; or the central office may require that grievance procedure written into contracts be utilized rather than that the issues be settled by economic pressure. If the union is to function effectively and if it is to fulfill its obligations to its industry and to its membership, considerable power must be delegated to the officers.

Delegation of power always creates the possibility of abuses, and the unions are microcosms which reflect the dilemma of the modern world: how to combine efficiency in administration with democratic process. Delegation of power by the members of unions has become increasingly necessary as the unions have grown in size and importance, and as their negotiations have involved increasing and more complex problems. A trade union executive operating in the older unionized industries—building trades—faced relatively simple problems in their negotiations with employers. Table-pounding and horse-trading and an occasional resort to economic power were the armory he carried to the tilting matches with the employer. The contemporary labor union executive has frequently to meet more complex and difficult problems. This has led to greater dependence upon the officer and it has, in fact, intensified a long-run trend that has been evident for many decades.

Originally the centering of power in the national organization was designed to prevent the dissipation of money and energy by local groups, the need to protect the strike fund built up by a national constituency from losses due to ill-advised and precipitated action by hotheaded locals, and to set up protective barriers against the intercity movement of strikebreakers. The demand by firms and even industries that the national organization underwrite contracts made by subordinates, the spread of collective bargaining, and the growth of regional and national negotiations have all led to the strengthening of power of the central officers. Moreover, as the unions grow in size the link between the membership and the officers becomes more tenuous. Once seized or accepted, power is not easily given up. In this regard not much difference exists between unions of the American Federation of Labor and the Congress of Industrial Organizations, except as these developments are influenced by time. Certainly no one would contend that the Amalgamated Clothing Workers of America or the International Fur and Leather Workers Union, C.I.O. affiliates, were more democratic than the ladies garment workers' and the printers' union of the A.F.L. The opposite seems to be the case. It is not easy to discover the reasons why some unions are more democratic than others, except that the membership and leaders exercise an influence in this direction. The need to place large responsibilities in the hands of the central organization makes it possible for a strong man to arrogate to himself much power. The United Mine Workers of America furnish a striking example of this process. Formerly one of the more democratic unions in America, with extensive power lodged in the districts, the spread of national bargaining, the decline in the importance of the old union districts, the unionization of new areas, and the maintenance of permanent tutelage over many once autonomous districts give the central officers dictatorial power over the organization. Nor is this the only example. As a matter of fact, a former president of the International Union of Operating Engineers, Arthur M. Huddell, sought to reorganize a number of locals and install his appointees as supervisors. His attempts were frustrated by the courts in two instances, but he succeeded in another. In the twenties, the then president of the electrician's union issued a number of blasts against discussion at union meetings. He was all for efficiency, and his pronouncements sounded like the speeches of a then popular dictator. While these are extreme examples of the quest for power, the structure of labor organizations makes possible similar attempts if ambitious and power-seeking men should rise to the top.

The issues are complicated by the real basis for lodging power in the hands of the officers. The development of a bureaucracy seems almost inevitable irrespective of philosophy or political outlook of the leader-

ship. It is, of course, true that in a number of C.I.O. unions a contest is still going on over the top offices. This is due to the relative youth of the organization, and the existence of factions which are in part inspired by outside political considerations. The United Automobile Workers of America exemplify this situations most clearly. Perhaps the great size of the union makes the "shaking down" process or leadership selection longer and more difficult to achieve. Other organizations have undergone similar experiences, and unless division in the union is based on political differences—socialist or communist factions—a bureaucracy forms, holds office, and operates the union.

An outstanding characteristic of bureaucracy is its stability and long control. Robert Michels has observed: "Long tenure in office involves dangers for democracy."[2]

While true, the labor union cannot afford to eliminate officials, its skilled negotiators, those who understand the industry and its problems, and who by training and temperament are the most qualified to lead the organization. Local (Big) 6 of the International Typographical Union limits the tenure of its presidents to two consecutive terms. The typographical union has perhaps the most highly developed and most vigorous political life and as far as can be ascertained no harmful results have followed from the above restrictions. The spirit of this rule has been partially evaded by the appointment of officers ineligible to succeed themselves as organizers by their successsors. In most unions some difference exists between the stability of national and local officers. While the turnover of local union officers is not large, it is by no means unusual for local officers to be defeated for re-election. Contests for local office are common in most unions. This is especially true in periods when the membership is dissatisfied with the results, or during wartime or a period of unemployment.

In the matter of stability of officeholding, some difference is observable between the length of tenure of local and national officers. Local officers are in more direct relation with their members and an opposition can observe their conduct more easily. Moreover, opponents can more easily rise to prominence. On a national basis opposition to the re-election of officers appears infrequently, for the advantage is greatly in favor of the incumbent, as many union constitutions forbid the formation of an opposition strong enough to challenge those in office.

Many top union officers enjoy unrestricted or slightly restricted power over the affairs of their organizations. This power can be used to crush a local opposing the national administration, as well as single or groups of members. Oppression of members is, however, most common

[2] Robert Michels, *Political Parties* (New York: Hearst's International Library Co., 1915), p. 97.

by local officers. It is true that the power of the national organization over the locals is by no means absolute, but within the area of its authority few restraints upon officers exist. The power to proceed against members and subordinate locals is very great; and courts have in the past taken the position that in cases involving discipline, members of a union must first exhaust the remedies offered by the union before the courts assume jurisdiction.[3] As a rule the courts will not intervene even when an honest error has been made. This view is summarized in *Snay* vs. *Lovely*[4] in which the court reached the conclusion: "Courts do not sit in review of decisions thus made by such officers even though it may appear that there has been an honest error of judgment, an innocent mistake in drawing inferences or making observations, or a failure to secure all information available by a more acute and searching analysis." A close reading of this paragraph indicates that a union tribunal must follow certain forms and, as one attorney engaged in labor practice has observed, unions have to go through a certain ritual, and the courts are hesitant to intervene if the external appearances of a fair trial are met.

It seems that the judicial attitude towards labor unions is founded on a fiction that is economically untenable. The courts have taken the view that "clubs, trade unions, professional associations, secret societies" are private organizations, and the test of a private organization is whether an institution is organized for a purpose other than making money. "Corporations, partnerships, joint adventures, joint stock companies, and business trusts are frequently the objects of judicial control, but their activities naturally cause public concern."[5] To maintain that the activities of labor unions do not cause public concern is a piece of legerdemain beyond the comprehension of the nonlegal mind. Whatever truth this view may have contained in the past has been erased by the spread of unionization, and the creation of powerful national organization able to paralyze strategic industries which vitally affect the entire economy. It seems fatuous to maintain that the doings of the coal miners' union is of no public concern or of the steel, automobile, railway, and trucking unions. Moreover, because of the inherent need for delegation of power and authority by the membership, the rise of power centers subject neither to control by the members nor by the government is almost inevitable.

The top executive of a national union exercises tremendous power—and the term "tremendous" is used advisedly. It is true that many do not intervene in the affairs of the locals, but they are in a position to do

[3] Zachariah Chafee, Jr., "The Internal Affairs of Associations Not For Profit," *Harvard Law Review*, May, 1930, p. 993.
[4] 276 Massachusetts 160 (1931).
[5] Chafee, *loc. cit.*, p. 993.

so whenever it suits their purposes. While intervention in the affairs of locals is not usual, the lack of intervention may be due to the absence of opposition rather than to the democratic character of the union. Here again it is necessary to stress that in the interest of sound management, the top officers should be given wide administrative authority, and cases can be cited—Local 604 of the stagehands—to show that the failure of the International to intervene constituted a dereliction of duty and failed to protect the membership. Once we grant the desirability of giving much power, we find ourselves facing the problem of how to protect the locals and their members against harassment. No assurance exists that the delegated power will be used only to advance the interests of the union rather than to solidify the power of the officers. It is unnecessary to assume that an opposition within a union is always motivated by high idealism. Sometimes it is inspired by the desire for office or by political considerations that are not relevant to the union's welfare. Right may be on the side of the administration, as in the case of the New York building service workers' union. Agreeing to return to work during a strike and to submit the issues to arbitration the local officers were assailed for accepting the arbitrator's award. Of course, the local officers had committed themselves to accepting whatever recommendations were made. The protest by a so-called "rank and file" group if it were accepted would make impossible collective bargaining, and certainly no employer would, under the opposition's terms, accept arbitration. Nevertheless, unless the union allows an opposition to present a policy and program hostile to the administration, the possibilities of democracy will be snuffed out.

In a controversy between an officer and a member or group of members, the advantage is on the whole with officials. They are the leaders and politicians with followers and retainers throughout the union. The officers control the official organs which can be used to belabor an opponent, to impugn his motives, to question his integrity and competence. The helplessness of an opposition against the experienced officers creates a danger for the union, as members dissatisfied with the administration can only find the possibility of redress in organizing around political radicals who themselves are schooled in the arts of mass agitation and appeal. An acute observer of the labor scene in New York City pointed out that of the twelve New York unions investigated by Governor Dewey, while serving as District Attorney, ten were captured by left-wing leadership. Recently members of the International Longshoremen's Association, dissatisfied with their President's administration and with his election for life, turned to left-wing leaders. While the threat was repelled, the fight has by no means ended. As in government, so in labor unions: democracy offers the best defense against extremism, and

dictatorships. Whether in government or within a union, damming the avenues of protest destroys the possibilities of gradual adjustment and peaceful reform.

Several of the reasons for taking action against locals are based upon a desire to protect the interests of the entire union. Locals are subordinate to the national union, and they should conform to the rules and policies elaborated by the larger group. In union administration as in government, conflicts between localism or home rule and centralized authority are not rare. Yet it is obvious that some of the reasons for intervening listed below are not adequate ground for undermining the autonomy of the smaller group and may lead to arbitrary exercise of power for selfish purposes. This is, as a rule, no separation of executive from judicial power, and even where an appeal to a convention or to the membership by a referendum is possible, unless the accused is supported by a strong local or locals, the verdict of the officers is not likely to be upset.

International officers have used their power to suspend opponents. The president of the International Union of Operating Engineers revoked the charters of several locals and placed a supervisor in charge. Members who protested were suspended from the union and denied employment. Only the intervention of the courts (*Rodier* v. *Huddell*, 232 N.Y. App. Div. 531, 1931) prevented the carrying out of this plan. (See also *Babrick* v. *Huddell*, 245 Mass. 429, 1923.) Clauses prohibiting vague and undefined acts are not uncommon in union constitutions, and under them the autonomy of locals can be destroyed. The following are some reasons for which locals can be suspended: Violation of international constitution or orders of general executive board; failure to make required reports; failure to hold regular meetings; lack of effort to build membership; becoming demoralized so as to jeopardize the International; failure to be represented at the district council; permitting attendance of members at meetings other than those held by the union at which union business is discussed; improper conduct; refusal to install a successor after an officer has been removed by executive board; refusing to bring members to trial when so ordered by the International; failing to enforce the penalty imposed by a proper tribunal within the union; resorting to courts before exhausting union remedies; issuing circulars or petitions that may injure the union. It was on such vague charges that the unions which originally organized the C.I.O. were suspended by the Executive Council of the A.F.L. It is obvious that the power given to the officers is too broad and indefinite, and it can be used to stifle proper criticism of policies or conduct of the general officers.

Even broader is the power over individual union members. An examination of a large number of union constitutions showed a wide

variety of offenses for which members could be reprimanded, fined, suspended, or expelled from the union. Offenses can be divided into violation of prohibition of specific acts, and violations of prohibitions of general, vague, and ill-defined rules. Union constitutions prohibit work below the union scale. This is definite and certain, and is designed to "promote the welfare of the union and achieve the objects for which the union was formed." A New York Court (*O'Keefe* v. *Local 463 of the United Association of Plumbers and Gas Fitters of the United States and Canada*, 277 New York 300, 1938) recognized that under its constitution and bylaws, the union "has power and right to take action reasonably calculated to advance its objects; even though such action involves interference with the employment of a member who has committed no wrong and against whom no charges have been preferred." Yet union constitutions also punish such vague offenses as the commission of a disreputable act, slandering the organization or its officers, discussing union business except at authorized meetings of the union, signing circulars or petitions which may injure the union, undermining the union, commission of a dishonorable act injurious to the union, refusing to obey a lawful order of an officer advocating secession or joining a dual union, and circulating literature attacking members without approval of the president or executive board. There are other general offenses listed but the above are examples of the type of vague clause found in union constitutions.[6] While a union must be prepared to act against disrupters and secessionists, spies and employer agents, the above clauses are too vague and general to offer adequate protection to the individual. Under these provisions it is possible to prevent criticism of officers' acts and steps to reform procedures or improve the union become *lèse-majesté* punishable by expulsion.

These are not merely academic objections; they are open invitations to arbitrary action by officers faced by criticism or danger of defeat in an election. When a group of members of Local 802 of the American Federation of Musicians sought to organize so that they might obtain the right to select their local officers, a number of leaders were fined \$300 on the ground that they had held a meeting not sanctioned by the governing board. Only an appeal to the courts prevented this order from being carried out. (*Koukly* v. *Canavan*, 277, N.Y.S. 28, 1935.)

Members of a New Jersey local of stagehands and motion picture operators who protested against discrimination in the charging of dues, allocation of jobs, and performing of "arm work" were brought up on charges and were forced to appeal to the courts. Local No. 244 of the International Alliance of Theatrical Stage Employees and Moving

[6] See Philip Taft, "Judicial Procedure in Labor Unions," *Quarterly Journal of Economics*, May, 1945, pp. 276–285.

Picture Operators arbitrarily classified its members as juniors and seniors. In addition, juniors had to perform "arm work" which meant that an employee did the work and an officer collected the pay. Estimates were made that one junior had earned $30,000 over the years which officers collected. A system of extortion was also practiced, for the officers controlled hiring. "Control over hiring gave the business agent power which was exercised . . . in a wholly autocratic and arbitrary manner. This complete control of positions was a vital element in aiding the extortion . . . " (*Collins* v. *International Alliance of Theatrical Stage Employees and Moving Picture Operators of the United States and Canada*, 119 N.J. Eq. 230, 1935.)

Recently a New York court ordered the Brotherhood of Railway and Steamship Clerks to reinstate a member who had been expelled for circulating material which reflected on the honesty of one of the candidates in a local election. The court held that the manner in which the expulsion had taken place was "repugnant to elementary principles of justice and fair play."[7] It is true that loose charges and slanderous attacks may weaken the union, but these are risks inevitable in a democracy. There is no way to insulate society, a movement, or an organization against unfair criticism except by preventing all adverse discussion. A measure of exaggeration and give and take must be allowed. Overstatement and even unjust charges must be tolerated if elementary rights are to be preserved.

Exposure of dishonesty can be punished under some union constitutions. In New York (*Shapiro* v. *Gehlman*, 244 N.Y. App. Div. 238, 1935) a member of Local No. 1 of the International Alliance of Theatrical Stage Employees and Moving Picture Machine Operators was suspended from the union after he had charged the business agent with malfeasance in office and conduct unbecoming a member. The business agent was exonerated, and the accuser was expelled for "making or circulating false or slanderous statements against an officer or member." This union held a closed-shop contract, and the expelled was denied employment. He appealed to the court which found that the charges against the business agent were substantiated, ordered the member reinstated, and awarded him damages.

Similarly a business agent of another local of the same union had a number of members expelled on charges of slandering an officer. The charges made by the members were true, and the court ordered the expelled reinstated. (*Polin* v. *Kaplan*, 257 N.Y. 277, 1931.)

The provision that the rights of a union member are protected will be met if the union has established procedure and given the accused a copy of the charges, an opportunity to confront his accusers, and a

[7] *New York Herald-Tribune*, Nov. 8, 1945.

chance to answer. If the union laws under which the accused has been expelled are contrary to public policy, the courts will set aside the verdict. It is also a generally established rule that civil courts will not examine the merits of the union decision if the complainant has had a fair trial. Under most circumstances the courts will not intervene unless the remedies provided by the union have been exhausted or unless the remedy is vain and unsubstantial. On this point the language of the courts is ambiguous. As a rule the courts take the position that they will not intervene until the member has exhausted his internal remedies. They also maintain that they will not substitute their judgment for the union tribunal. There is some merit to this view. Yet, as one attorney[8] pointed out:

> The problem has its practical aspects in unions where the "administration" is in full control and is guided by a lawyer who knows the verbiage of the cases on the subject. I have seen instances where the entire rigamarole of fair hearing was outlined in advance of the preparation of charges against members who made things a bit uncomfortable for the officers of their local union. It has worked because the lawyer for the member did not think that the situation was one in which law still had to be made.

The courts rightfully seek to lessen their intervention in the internal affairs of labor unions. However, with the increasing power of unions and the growth of some forms of union security, well-managed unions are of great importance to the worker. As has been stated at the outset, the officers need to be given authority to administer affairs and protect the union against disruption. At the same time, the member must be protected against oppression. The dilemma is one common to our society. Yet it is reasonable to conclude that the attitude of the courts on this subject springs from a desire to escape from having many difficult, almost unsolvable, problems tossed in their laps. Unions are not private organizations in the same sense that a social club is. On the contrary, they are very powerful groups which can destroy important property rights of their members. Moreover, the legal protection unions receive shows their existence and conduct are of public concern.

Some courts have held that where property rights are involved, a member "need not exhaust his remedies within the organization." (*Harris* v. *Geir*, 112 N.J. Eq. 99, 1932.) Another court has stated: "The right to contract for work is one of the most important property rights, and therefore the power of a court of equity may properly be invoked to restrain its impairment." (*Heasley* v. *Operative Plasterers and Cement Finishers Association Local No. 31*, 257 Pa. 1936.) In another Pennsylvania case (*Dorrington* v. *Manning*, 135 Pa. Super Ct. 194, 1938) the court ordered the Amalgamated Association of Street Electric and Motor Coach Employees to admit long-term employees into the union who were discharged under a closed-shop provision after they were

[8] In a letter to the author.

denied admission. We know that labor has contended—as in its opposition to railroad consolidations that would wipe out jobs—that a job constituted a property right.

Legislative interference with the internal policies may, however, lead to results that will seriously impair the ability of trade unions to perform their essential functions. For example, some decades ago the problem of corruption and bossism in our political parties was met with the establishment of the primary elections. The bosses in the old political parties usually nominated through a hand-picked convention representatives of all groups to whom the party had to appeal for support. Under the primary system, the gates were opened to any contender with the result that sometimes a casual or a businessman with money to spend received the nomination. The nomination was thus democratically arrived at, but the cost was sometimes a leaderless party. Under the direct primary system the party became unpredictable. Nominations became atomized. How does atomization affect a trade union: a bargaining and fighting organization must have permanent leadership that looks to the future of the organization. That opens the possibility of bossism and oligarchy. But in grappling with this danger of oligarchy, we must not overlook the opposite danger—this atomization which makes leadership a plaything for casuals. At the present time we are suffering from too much casualness in our political leadership.

A union leadership that is uncertain and insecure is likely to be weak and indecisive. Yet it is clear that great power must be delegated, and that such power can be, and is occasionally, abused. In many instances appeals against oppression are expensive, take time, and constitute a great burden upon the suspended and expelled member. Exercise of unlimited or even extensive and uncontrolled power can be justified only by great emergencies. Fortunately these are not permanent. While the level of honesty, integrity, and public responsibility is as high among labor leaders as other social or economic groups, the exercise of unrestricted power encourages abuse, arrogance, and irresponsibility. Actions of labor leaders should be subject to review, and where decisions involve a serious loss or burden to individuals, it is imperative that an impartial body should exist for appeal. No union officer should be immune from appeal against his acts, and to my mind the labor movement should itself create an impartial tribunal—a sort of Federal Trade Commission—which would furnish quick and inexpensive review. Most unions regard such suggestions with extreme distaste, but only some such program, it seems to me, can ward off permanent and more stringent regulation of labor unions.

DISCUSSION

Herbert R. Northrup: There is much in Dr. Leiserson's paper that is beyond question. For example, his analysis of the dangers and impotence of compulsion as a means of achieving labor peace should be reiterated so loudly that it can be clearly heard in the legislative halls. Australia, where nation-wide strikes have only recently caused the indefinite postponement of a projected labor-management conference, is the classic example of the inability of compulsory arbitration to accomplish its basic purpose in a democracy.

Likewise, Dr. Leiserson has correctly appraised the weaknesses of the current fetish for "fact finding." What is usually in dispute is not facts, but their interpretation, and there are generally as many interpretations as there are interests involved. Rather than terming fact-finding boards a type of arbitration, however, I believe that they should be considered "conciliation boards," as they are designated in the Canadian Industrial Disputes Investigation Act. For if the members of these boards want their findings to be accepted, they must give due weight to the bargaining power of the parties; i.e., they must conciliate, not arbitrate.

I agree with Dr. Leiserson that mediation is the backbone of successful governmental labor adjustment machinery and that therefore the United States Conciliation Service must be greatly improved. I do think, however, the procedural elements are not too important. It is probably immaterial whether the Conciliation Service is administered by one man or by a board, but it is essential that the conciliation officers should be carefully selected, adequately trained, and absolutely impartial.

As to Dr. Leiserson's basic proposal, namely, that the principles and methods of the Railway Labor Act "are essential to any systematic plan for avoiding labor warfare," I must register an emphatic disagreement. It is true that labor peace has prevailed on the railroads since 1926, and it is true that this condition has generally been attributed to the Railway Labor Act and its administrators. One may search the literature in vain, however, for any careful investigation of the Railway Labor Act's disputes machinery. Proponents of the act have merely assumed that its procedures and administration must be responsible for peace on the rails and have praised both accordingly.

Events since 1941 have cast considerable doubt on the validity of this assumption. In every important case since then in which the railway unions were not satisfied with emergency board recommendations, they refused to accept them and made use of their political power to obtain more favorable terms. This indicates that the Railway Labor Act is successful in maintaining peace only when the unions secure a settlement satisfactory to them. Otherwise, they resort to more direct political action to attain better terms.

These wartime developments should not be surprising. The Railway Labor Act—especially the 1934 amendments—were drafted for the benefit of the railway unions, and their adoption is testimony to the political power of these unions. If the unions fail to achieve their ends by one political

method, what could be more logical than that they turn to another?

It may be argued that events since 1941 occurred during a short emergency period and therefore no conclusions may be drawn from them. But it is precisely in times of labor stress and emergency that effective adjustment machinery is most necessary. Moreover, as Dr. Leiserson so well points out in the case of the War Labor Board, the decisions and practices of the emergency remain with us long after the emergency is past.

There are other reasons why I believe that the Railway Labor Act plays only an incidental role in maintaining peace on the rails. Government control of railway labor relations is merely a part of the entire policy of regulation, which includes also control of rate setting. Price relief through the Interstate Commerce Commission cannot be ignored by those who would use industrial relations on the railroads as a model for industry generally.

Moreover, the political power of the railway unions is not always used against the railroads. The unions and the carriers have many aspirations in common, and the unions have played an important role in obtaining legislation favorable to the railroads and disadvantageous to other forms of transportation. This political alignment is undoubtedly conducive to labor peace.

Dr. Leiserson's proposal to establish adjustment boards modeled on the National Railroad Adjustment Board for the purpose of arbitrating grievance disputes is also unacceptable to me. I agree that grievances should be peacefully settled, and arbitrated, if necessary, but I do not believe that far-reaching governmental intervention is superior to having parties work out the machinery by themselves, even if the latter method requires more time and initially more strife. Certainly the manner in which the National Railroad Adjustment Board ignores the basic requirements of due process and hands down decisions which Professor Sumner H. Slichter has so well termed "among the strangest in the annals of industrial relations" does not encourage emulation.

Dr. Leiserson's proposals lead to another important consideration. The mere existence of such elaborate machinery as he suggests would be an invitation to irresponsible labor and management to refuse to settle disputes in bargaining in the hope that more might be gained by government intervention. This would surely aggravate our present difficulties.

It seems to me that procedure in these matters must always be secondary. The primary requirement is real collective bargaining by responsible men honestly intent on reaching agreement. So long as either party depends upon the government to give it more than can be secured by bargaining, industrial strife will prevail and peace will be achieved only by political maneuvering such as has featured the settlement of railway labor disputes since 1941. A return to a bargaining equilibrium cannot occur without a period of unrest and adjustment such as we are witnessing today. Good faith cannot be legislated into the industrial relations picture by a legal prescription commanding parties to bargain any more than it has been by the legal proscription commanding management not to refuse to bargain. Our greatest hope is that neither ill-conceived nor one-sided legislation is rushed into

law so that the attainment of a bargaining equilibrium is indefinitely postponed, especially since legislation of any sort is not likely to provide the solution to the present difficulties.

DEXTER M. KEEZER: I am in general agreement with Mr. Leiserson's diagnosis of what currently ails the conduct of labor relations in the United States. I do not, however, find the remedy he proposes for this ailment entirely clear. And insofar as I think I understand it, I do not find the remedy altogether convincing.

Mr. Leiserson's diagnosis of the trouble is, I take it, summarized by his statement that "our present state of industrial war is largely due to government efforts to impose terms of employment while it attempts at the same time to encourage the practice of collective bargaining." I am not sure that we would not be having quite a bit of industrial war at this time regardless of whether we were relying exclusively on collective bargaining or exclusively on government prescription of wage rates and working conditions. But I am sure that the present situation is complicated by having a mixture of the two. They do not mix. If there is any single lesson our wartime experience in dealing with labor disputes should have taught us it is that. The National War Labor Board was available to direct the terms of settlement of any consequential dispute by what amounted to compulsory arbitration. As a result there was no finality about collective bargaining over wages and working conditions, and it went to pieces accordingly. There were numerous instances where disputes were taken to the Board for settlement before the parties had even talked over the issues involved, let alone bargained over them. Its tripartite membership saw eye to eye on very little, but there was no disagreement around the Board that it had crippled collective bargaining between workers and employers. A somewhat new form of group bargaining of a sort, with members of the War Labor Board acting in the role of middlemen, emerged, but that was not collective bargaining in the accepted sense of the term.

The process of crippling collective bargaining continues, of course, at the hands of the so-called "fact-finding" boards which look into major wage disputes, announce their impressions of what would be suitable settlements, and rely upon public opinion to give these impressions force. These boards would be better designed to defeat the announced policy of the federal government to get back to collective bargaining if their conclusions were given the force of law instead of merely the force which the prestige their personnel and the government gives them; but the difference would only be one of degree.

I do not wish to seem to be arguing that because the National War Labor Board wrecked collective bargaining and the "fact-finding" boards continue to do so they thereby become evil arrangements. In my opinion it was more important to have the National War Labor Board sit on the labor relations lid in wartime—and it is my judgment that it sat fairly tight—than it was to protect collective bargaining and the economic freedom that goes with it. And right now, it may be more important to have the government

do everything possible to prevent strikes by decree (of course it cannot stop them) than it is to safeguard collective bargaining.

Mr. Leiserson's analytical point, as I understand it, is that the government is not making a clean-cut choice, and thereby inevitably tangling up what, without assistance, is always a sufficiently tangled up course of labor relations. I think the point is well taken.

Mr. Leiserson makes it clear that, in principle, he thinks the remedy is for the government to get out of the business of trying to impose terms of employment and concentrate its energies on a systematic and sustained program of mediation. "The basic principle," he says, "is that main reliance for maintaining peace must be placed on mediation, not on arbitration, or so-called 'fact finding' or other devices that are sometimes used." He then proceeds, however, to outline his program to keep the industrial peace which has as a final recourse in major disputes "public investigations with recommended decisions." How does that differ from what we now have? And how would it avoid undercutting collective bargaining and an effective program of mediation? I do not find a clear answer.

I infer that Mr. Leiserson really sees the problem as one of emphasis and thinks there is too much emphasis on the "fact-finding" (always in quotes) process now whereas there was just about the right amount in the administration of the provision of the Railway Labor Act for appointing Emergency Boards—at least until it became something of a habit to revise the wage settlements recommended by these boards upward at the White House, as was done in 1941 and again two years later. It is my impression, however, that the success of "fact finding" in preventing strikes in the railroad industry (my direct experience was limited to serving on three Emergency Boards) is to be explained largely in terms of the maturity of the unions involved, the fact that the industry is a public utility, the fact that the Emergency Boards were not skimpy in their recommendations and, most important, the fact that Dr. Leiserson was around quite a lot of the time, as the Chairman of the National Mediation Board, to help make the process work. At any rate, I think his remedy needs clarification, and perhaps revision, insofar as the role of government "fact-finding" boards is concerned. As it stands, it does not seem to me to jibe with his diagnosis of the basic difficulty.

It is entirely clear, however, that in trying to settle labor disputes Dr. Leiserson thinks we would be wise to place our main, if not our exclusive, reliance upon government mediation rather than government prescription. I certainly hope he is right. Even if it worked only tolerably well, I would prefer a system of collective bargaining, lubricated by government mediation, to a tidy system of government dictation of the terms of employment. My feeling has to do with what seems to me the incompatability of the prescription of the terms of employment, except in the gravest emergencies, with our basic framework of free government.

I am by no means positive, however, that we shall get a tolerable solution of our labor problems in the relatively free-wheeling system which Mr. Leiserson suggests. It is possible for a mediator to do a perfect job so far as

getting a labor dispute settled is concerned, but to do it on terms which are subversive of both good economic sense and the public interest. In other words fine labor relations, in the sense of keeping management and labor relatively happy, may involve more than dubious economic and public policy. Witness the amity of many employers and unions in making arrangements to gouge the consumer by restriction of output. Consequently, collective bargaining, supplemented by mediation, can only be trusted to result in agreement on terms of employment which are clearly in the public interest when the forces playing upon collective bargaining are such as to keep it within the bounds of good sense and good public policy.

Do these bounds now prevail or are they likely to prevail in the future? About all that I can say in the time allotted to me is to remark that the answer is less clear to me than I wish it were and less clear than it seems to Mr. Leiserson. Certainly, if the bounds exist they are created by forces quite different than those upon which economists have concentrated in developing the old-line competitive analysis. How different in magnitude, at least, these forces are is underlined by the fact that last year one master labor agreement of a single automotive company—the General Motors Corporation—covered about 325,000 workers and 115 separate plants. At the time, the union in question—the United Automobile Workers, C.I.O.—was reported to have about 1,300,000 workers. Over 400,000 steel workers and all the major producing companies were involved in a single consolidated case before the War Labor Board.

I would have more confidence that the public interest would be properly protected in the process of collective bargaining by such enormous aggregates of power as these if there were a fairly coherent and generally understood body of principles to shape the process. The sad fact, however, is that there is not. How should the proceeds from increased productivity of labor in manufacturing be distributed between workers, owners, managers, and consumers? Ask that question at almost any gathering of union officials and employees and what do you start? An orderly and hopeful search for facts and applicable principles? You do not, if my experience is any guide. You generally start a shouting match, which may degenerate into a brawl, and in which all sides feel not merely free but called upon to indulge in almost unlimited amounts of economic hokum—primarily because there are no respected principles to which to appeal. Indeed, it has been my sad impression at times that one is not counted thoroughly qualified for the successful practice of industrial relations on either side unless he is ready, at the drop of a hat, to unloose a flood of economic pettifogging and obfuscation.

For this state of affairs I am much more inclined to blame the economists than I am the labor relations practitioners. But that is beside the point. The point is that so long as collective bargaining remains such a rough and tumble business and the forces involved are so tremendous, I doubt if the prospects of having the government keep out of it, in any but the primary role of mediator, are very bright. Since I agree in general with Mr. Leiserson's diagnosis, I realize that this may be tantamount to saying that I

suspect labor relations will continue to be a mess—at least until the economists go to work and pound out some principles to guide the distribution of the product of industry, not in 1776 nor in the better world to come in the future, no doubt, but in the United States of America in 1946.

CHARLES W. ANROD: Dr. Mire's paper contains a comprehensive appraisal of the present unsatisfactory status of personnel relationships in the public service. Government today is the largest employer in the country, mainly due to the fact that, in the last few decades, it has engaged in various business activities with which formerly it had no connections. But no generally accepted or definite theory of collective bargaining in public employment has been developed in the United States so far. There is little law to guide the interested student and almost no litigation directly in point.

Many public administrators, especially the National Institute of Municipal Law Officers, tend to base their examination of employer-employee relationships in the public service on fixed and absolute rules of law formulated in times gone by. They proceed on the basis of legal logic rather than on actual life. They simply disregard modern social trends, social groups and group relationships, and pay no attention to present-day methods of personnel management. No small wonder that their conclusions fail to offer constructive solutions to the crucial social and economic problems of public employees.

On the other hand, advocates of collective bargaining in the public service are sometimes inclined to minimize the fact that there do exist certain definite differences in the very nature of public and private employment which have to be taken into consideration in trying to find a fair solution. Moreover, any attempt to treat alike all public employees without distinguishing between the functions and legal capabilities of the various government agencies easily leads to unrealistic results.

However, no matter what the legal situation may be in any particular governmental unit, collective bargaining does exist in the public service and is increasing steadily. We have collective bargaining *de facto* regardless of the situation *de jure*. What is needed is a "progressive-uplift" theory of collective bargaining in public employment based on the social pattern and ethics of the twentieth century which will reconcile the conflicting interests. Such theory should then be crystallized into law. The time limit allows a discussion of only a few of the interesting issues raised by Dr. Mire.

1. Have public employees a right to form and join unions of their own choosing?

I agree with Dr. Mire that public employees' unions have a rightful and legitimate place in the public service. The guiding statute is the Lloyd-LaFollette Act of 1912 which provides that postal employees may form and join labor unions, provided they do not thereby obligate themselves to engage in strikes.[1] Although this Act deals only with postal employees, it is

[1] 37 Stat. 555; 5 U.S.C. Sec. 652; *Railway Mail Ass'n* v. *Corsi*, 65 S. Ct. 1483; 89 L. Ed. 1435; *Levine* v. *Farley*, 107 F. (2d) 186; cert. denied 308 U.S. 622.

commonly assumed that its basic principle is applicable to federal employees in general.[2] And it seems also a fair assumption that what federal employees can do should likewise be permitted employees of the states and their political subdivisions. Other commentators have based the right of public employees to organize on the first amendment of the Constitution guaranteeing "the right of the people peaceably to assemble, and to petition the government for a redress of grievances." There is no doubt that public employees are entitled to form and join labor unions as a matter of principle and law. Consequently, official regulations interfering with or restricting that right are, in my opinion, untenable.

2. Is collective bargaining as such between unions of public employees and the government compatible with public policy of national and state governments or any political subdivision thereof?

Implicit in the right to organize there has always existed the reciprocal obligation on the part of the employer to negotiate and bargain with his organized employees. The necessity for such correlative duty is evident, for, without it, the right to organize would be meaningless. Thus, since the right of public employees to form and join unions can scarcely be disputed, it cannot possibly be against public policy if the government negotiates and bargains with such organizations on all matters which lie under the authority of the administrative officers. Dr. Mire has rightly pointed out that the exemption of public employees from the provisions of the National Labor Relations Acts and most state labor relations acts means only that public employees do not enjoy the same protection of their collective bargaining rights as do private employees. It may be added that constitutional objections obviously influenced Congress against attempting to give the National Labor Relations Board authority over employment relations of the states and their political subdivisions.[3]

Dr. Mire has not addressed himself to the problem of exclusive union recognition. The duty to recognize a union representing the majority of the employees in a given unit as the sole and exclusive bargaining agent is the law of the land as far as private employees are concerned. This is in accordance with the fundamental political principle which underlies American democracy. The same principle should prevail with respect to collective bargaining in the public service, provided, of course, that the union is open to all qualified employees and, provided further, that no individual employee is prohibited at any time from presenting grievances to his superior.

3. Which basic modifications to the normal details of collective bargaining are inherent in public employment?

Dr. Mire's position on the "closed" or "union" shop calls for clarification. For instance, in a recent publication sponsored by the Labor Committee of the Twentieth Century Fund, the authors came to the conclusion that "the closed shop—viewed as a method for protecting union standards—has far

[2] "Government Employees and Unionism," 54 *Harvard Law Rev.*, 1360.

[3] National War Labor Board in re Municipal Government, City of Newark, N. J., 5 War Lab. Rep. 286 (1942).

less reason to exist" in public than in private employment.[4] Moreover, the meaning of the doctrine of free opportunity underlying the merit system in the public service is that every qualified citizen may be employed by the government, irrespective of whether or not he is a member of *any* organization. Pursuant thereto, a court of last resort lately held that a citizen who is or is not a member of a labor union cannot, by that fact alone, be barred from a position in the public service.[5] Dr. Mire has advanced no argument which would shatter the force of such ruling. It should also be mentioned that, under the British Trade Disputes and Trades Unions Act of 1927, it is illegal for public authorities to make membership or nonmembership in a trade union a condition of employment by the authority.

I believe Dr. Mire would have served a useful purpose had he elaborated on the differences in the collective bargaining rights of the various groups of public employees growing out of the diverse functions and legal powers of modern government agencies. The recognition of that distinction has sometimes led to the dividing of governmental activities into so-called "administrative or nontrading" and "industrial or trading" functions. In deciding matters of liability for torts, etc., the courts have long relied upon the difference between activities of an essentially or strictly public character cast upon the government and those which relate to what may be considered its private business. It may be that such differentiation can also be used in the field of industrial relations as a guide to a workable demarcation line. Another school of thought proceeds on the principle that every activity of the government within the limits of its power is governmental or administrative in character. If one adopts that tenet, another criterion (based, perhaps, on whether or not the basic operative funds are appropriated by the legislature) has to be devised to determine the scope and methods of collective bargaining in the various governmental units. Further research must clarify this complex problem. Yet, whichever doctrine may prevail, sound understanding and common sense cannot be blind to the fact that, for instance, the employment conditions of a police officer differ fundamentally from those of a sales clerk in a state-owned liquor store. While collective bargaining as such may be carried on (within the limitations I have indicated) with respect to all public employees, it is obvious that its range is necessarily narrower in the administrative sphere than it is when the government engages in the field of ordinary business. I can hint at only some of the more important questions involved.

For example, it cannot be conceded that employees in the administrative agencies, such as the police, fire, sanitary departments, etc., have a right to strike against the government. A strike in this branch amounts to an obstruction of the proper discharge of essential and typical governmental functions as such or even to open insurrection. No government which presumes to maintain itself will permit the breakdown of any part of its ad-

[4] S. T. Williamson and H. Harris, *Trends in Collective Bargaining* (New York, 1945), p. 160.

[5] *Mugford* v. *Baltimore*, Maryland Court of Appeals, 10 CCH Lab. Cases No. 62, 850; 17 Lab. Rel. Rep. 588.

ministrative machinery. This doctrine is, incidentally, indicated in the Lloyd-LaFollette Act, *supra*.

Furthermore, the funds necessary to operate the administrative branch or those required to improve existing wages, hours, or working conditions can generally not be paid except in pursuance of an appropriation made by the legislature. Any attempt to settle these matters through collective bargaining would amount to a usurpation of legislative power and, therefore, would be illegal. Of course, no objections can be raised to lobbying or conducting joint conferences relative to wages and other matters that do require additional money and submitting the result to the proper legislative agency. Those procedures may well affect the course of developments but they amount only to collective suggestions having no binding force upon the government. However, there is still left a wide field for collective bargaining regarding such important matters as grievance procedures and assistance in the presentation of grievances, seniority and promotion standards, training programs, schedule of hours or vacations, health and safety measures, rules as to leave of absence, uniforms or working clothes, and so on.

The situation is altogether different in the trading branch of the government. If the government goes outside the ordinary sphere of governmental administration and supplies transportation, light, power, heat, bottled mineral water, etc., or operates liquor stores, tourist camps, etc., it acts in the same way as a private corporation for gain and profit, and sometimes even competes therewith. Money is made and lost on a commercial basis, and, generally speaking, no act of the legislature is necessary to obtain the operative funds. It is manifest that the nature of the ownership cannot affect the collective bargaining rights of the public employees in question.[6] Apart from the possible limitations above mentioned, they are entitled to substantially the same collective bargaining rights with respect to wages, hours, and working conditions as are accorded to employees in private industry. In conformity with a court decision directly in point[7] their right to strike lawfully for economic reasons cannot summarily be dismissed but demands serious study. I do not want to be misunderstood. I certainly do not advocate strikes in public utilities, but I am of the opinion that such industrial disputes should be settled through mediation or voluntary arbitration regardless of whether the property is owned publicly or privately. But anybody who believes in a free society and civil liberties will be very reluctant to deny to any social group a basic right, unless, as in the case of administrative public employees, the exigencies of the circumstances do clearly not allow him any other choice.

Collective bargaining in public employment is only in its infancy. But the same forces which brought about collective bargaining on a large scale in private industry are also coming to the foreground in the public service. The sooner we adopt collective bargaining in theory and practice, the better will it be for the government, its employees, and the public at large.

[6] *Local Union No. 876* v. *State Labor Mediation Board*, 294 Mich. 629; 293 N.W. 809; *Nutter* v. *City of Santa Monica*, California Superior Court, 8 CCH Lab. Cases No. 62,323; 15 Lab. Rel. Rep. 18.

[7] *Village of Celina* v. *Now*, Ohio Court of Common Pleas, 9 Lab. Rel. Ref. Man. 789 (1941).

MARK STARR: "Although there may be union executive groups who constitute a rubber stamp for the president, they are the exception. As a matter of fact, American trade unions are far ahead of any other element in American life in the operation of democracy," maintains Robert J. Watt, international A.F.L. representative, in a dissenting footnote comment to the final chapter, "Report and Recommendations," in *Trends in Collective Bargaining*, the most recent book on the subject. The bogey of union dictators is largely a press creation swallowed by the public in the fear which grows out of its ignorance of the trade unions which quintupled their membership in the New Deal decade, but only slightly increased their public relations activity.

You may want to sandpaper Petrillo but his members like him tough and he is expressing the fears of his members against themselves making the canned music to play their own funeral march. Would professors like to make a recording of their lectures and then take their places in the breadline, despite the fact that some of them sound like that already to their students? The parallel, of course, would be the circulation of the canned lectures of a few centralized experts. Like Petrillo, they would ask, "Why should the ice man make the refrigerator?" As citizens, we should reply to that fear by adequate provision for dismissal wages, plans for retraining, and adequate unemployment compensation. The nub of the difficulty in music and mining is not the personal behavior of Petrillo or John Lewis. Many critics who allege union autocracy and bureaucracy do not like unions anyway. But Mr. Taft is not in that class and his thoughtful and scholarly paper shows awareness of the difficulty of reconciling democratic controls with the efficient administration of unions whose functions now resemble, much more closely than in their crusading days, the running of a business concern.

Even the fiercest critic of the third term for the late President Roosevelt does not advocate that the president of his bank should be automatically retired and the tenure of most corporation heads is more assured than that of union presidents. And there are by far more union delegates in the conventions which re-elect union presidents than shareholders present to re-elect say, the president of General Motors.

Professor Taft shows why collective bargaining demands executive powers and union discipline. The point can be well made that local autonomy varies according to the scale of the industry. A local of a railroad brotherhood could not make a local agreement but a printers' or building trades local can and does. But with nation-wide government orders and legislation (accelerated in wartime), the power of the union central office grows. A union officer, due to be automatically ditched at the end of a given term of office, would be more in danger of accepting a job with a government agency or the employers' association.

Union leaders have to combine the functions of a politician and of a business executive. (See the chapter already referred to for a more detailed analysis of the hybrid character required.)

An increasing number of union leaders would accept Professor Taft's

proposal of an impartial tribunal set up by the unions. All union members would benefit from a careful reading of Professor Taft's paper.

As a demonstration that some of us are thinking about safe-guarding democracy in our unions, may I quote my article, "Trade Unions: Bureaucratic or Democratic?" to appear in *Forum* (April, 1946):

> How to meet the difficulty is a complex question. Workers' education, producing a mentally-alert rank and file with a grasp of labor history and philosophy, would be of tremendous assistance. Educational activities in a union must steer clear between two perils of creating an antiadministration opposition clique and a yes-man chorus and thus avoid both blind acceptance and constant carping. Obviously union education supports the *status quo* in union administration, just as education maintained by any institution. Yet that should not rule out the duty of constructive criticism and the discussion of dissenting opinion in union classes. Indeed wise union leaders would encourage this.
>
> . . . What one can be sure about is that in the union journal and in union meetings channels for discussion and criticism ought to be forever kept open, that union officers should welcome and encourage ideas and criticisms from the younger members; that those younger members, instead of being driven into permanent opposition (and being built up and flattered by the communists and outside agencies to be used as their tools, which has happened in the case of some right-wing unions) should be given posts of responsibility so that they can sober the fanaticism of youth with administrative experience.
>
> Union leaders and business agents should see that the economic power which they hold through the closed shop and the union shop is never used to penalize individuals who disagree with them. (A staff member of a union, Will Herberg, in *Antioch Review*, Fall, 1943, made an excellent critical and thought-provoking analysis of this danger.)
>
> Presumably, bureaucracy exists when means become more important than the end sought and when rules and procedures are continued because persons have vested interests in their continuance. An awareness of the necessity of constantly examining both means and ends and a recognition that they can and must be changed to meet unavoidable changes of growth—this would be the best antidote in the unions as elsewhere for bureaucracy. Unions should set up a court of appeal to which any member might go in case of suspected black-listing by his union, just as he would go to the union if the employer tried to black-list him. In some instances the unions should set up such a court of appeal composed of officers in other unions and of trusted friends of labor from educational and legal circles. Fundamentally, the development of civic intelligence and a keen desire to apply democracy to industry and to trade union practices would be the real and lasting safeguards.

LLOYD G. REYNOLDS: Professor Taft has catalogued the various practices which have caused trade unions to be criticised as undemocratic and there is no need for me to retrace this familiar ground. I would like rather to inquire what is meant by the term "democracy" when applied to a trade union. How would a perfectly democratic union of five hundred thousand workers be governed? By what objective standards can one determine how closely a particular union approximates to the democratic norm? Until these questions have been answered, there is no analytical basis for a discussion of concrete union practices. Considerations of brevity compel me to state my suggestions somewhat dogmatically; but this may have the advantage of stimulating further discussion of a problem which has received altogether too little attention.

We are concerned here with only one aspect of the problem of union government. The requirements of *democratic* government are much narrower and simpler than those of *good* government. Conversely, an analysis of the administrative efficiency or structural perfection of a governmental system cannot prove anything about its democratic or undemocratic character.

It is necessary to make this point because some of the allegedly un-

democratic developments in trade unions have nothing directly to do with democracy and raise only technical problems of governmental structure. An example is the growing centralization of authority in national union headquarters. There is actually no evidence that centralization has been carried farther than economic circumstances require. Indeed, employers in some of the mass production industries complain that there is too little central control over the locals. But even if such evidence could be presented, it would prove no more than a maldistribution of authority among the various levels of union government. A second instance is the extensive delegation of executive and even legislative authority to national union officers, who in turn employ a sizable nonelective bureaucracy. This tendency, which cannot be avoided in any large political unit, presents certain problems of administrative efficiency and of accountability of officers to the membership. Many unions have found ways of ensuring adequate accountability, particularly for expenditures of union funds. But even where adequate safeguards do not exist, this is a structural defect in union government and does not per se raise any issue of democratic principle.

The key structural requirements of democratic government are general suffrage, free election of legislators, and control by the legislators over expenditures of funds and other executive actions. The constitutions of most unions conform very well to these requirements; the major structural defects are probably the indirect election of national officers by delegate conventions in most unions and the long intervals between conventions in a few unions. But, it is said, governmental practice departs widely from the constitutional forms; most unions are actually operated by a political machine whose members have a strong interest in perpetuating their own positions. This is largely true but not very relevant. The leaders of any social group, being human, pursue their own interests along with those of the group. Political machines, far from being undemocratic, are a leading feature of democratic government in any political unit larger than a village. If the advent of democracy depended on the dissolution of all informal political groupings (machines) and on the appearance of pure-hearted leaders, we should wait a long time. Actually, democracy requires only that there be reasonably free competition among rival machines, and that the self-interest of union leaders be canalised in directions beneficial to the membership.

Where general suffrage and free elections exist, it is to be expected that the legislature and the executive will act in a way consonant with the interests of at least a majority of the electors. Such action, if not a condition of democracy, is at least an immediate result. Can we not, then, use as a test of democracy the extent to which the collective bargaining demands and other actions of union leaders conform to the short-run or long-run interests of a majority of the membership? I do not think so. In the present state of economic science, no one can say with certainty what actions would best promote the welfare of union members at a given time. Even if it were possible to detect deviations of union policy from some norm of economic behavior, investigation would probably reveal that these deviations are not primarily due to irresponsible action by autocratic union leaders. On the

contrary, they are probably due mainly to the fact that union officers respond to their members' opinions on economic matters even when these opinions are misguided.

In short, most of the common "proofs" that unions are undemocratic merely prove that the government of many thousands of men scattered throughout the United States is a rather complicated matter. There remains, however, a more searching test of democratic procedure: is the union member free to criticize the local or national officials of his union and to work openly for their defeat at the next election? Is there a judicial system which effectively protects the dissenter against expulsion from the union or other forms of political reprisal? Judged by this standard, many unions do not fare very well. As Professor Taft has pointed out, definitions of what constitutes disloyalty to the union open the door to arbitrary punishment of anyone who disagrees with the leadership. The constitutional provisions concerning the trial of accused members, while usually adequate on paper, may not give the member much protection in practice. The problem gains greatly in importance from the fact that, in a strongly-organized industry with union shop contracts, expulsion from the union may destroy the worker's means of livelihood. It is true that union leaders may not take political advantage of the life-and-death powers thus placed in their hands; but the existence of such powers is itself dangerous. Here, then, is the core of the problem of union democracy. If there is any need to "do something about it," the need lies in this direction.

Effective safeguards against arbitrary expulsion would not only increase the worker's job security but might also have far-reaching effects on union politics. If workers had complete freedom of speech and action, the leaders of many unions would be subjected to more vigorous criticism. Potential leaders appearing in the lower ranks of the union could develop their talents without fear of a purge. The basis would be laid for the development of rival machines to the one in power, and the members would be given an effective choice of leaders.

This would mean, of course, an increase of factional conflict in the union. While such conflict might keep union officials more sensitive to membership opinion, it would also have obvious disadvantages. It would facilitate penetration of the union by groups interested primarily in promoting a political party, or in forming a rival union, or in disrupting the existing union for some other reason. Factionalism might embarrass the union in its relations with employers and weaken its hand in bargaining negotiations. Union officials might be forced to spend most of their time fighting political battles within the union instead of furthering the economic interests of the members.

We are thus confronted with a basic issue of social policy: do we wish above all to protect the security of the individual worker in his union membership and his job, even though this may lead to weakened and faction-ridden unions? Or do we want strong and well-disciplined unions, even if this requires authoritarian control by union leaders? The choice involves

both economic and political considerations, and powerful arguments can be marshaled on either side.

Suppose this issue is resolved in favor of maximum protection for the personal rights of union members. What institutional arrangements would be necessary for this purpose? A clear definition of the grounds on which members may be expelled or removed from union office is obviously desirable. Given this, the main problem is to devise a way of giving the accused a fair trial *in the court of first jurisdiction.* The slowness and complexity of appeals procedures is a powerful deterrent to their use; justice must usually be done in the first instance if it is to be done at all. Effective reform must come, therefore, through improvements in judicial procedure within the union, and particularly through improvements at the local level. Faulty procedures within the union cannot be remedied very effectively by appeals to the civil courts or to some other government agency.

Time permits only brief mention of the problem of securing a fair trial for members accused of violating union law. A complete discussion would require consideration also of procedure for the trial of union officers and for the suspension or revocation of union charters.

Union members are usually tried initially by officers of their local or by a trial committee appointed by the officers, a procedure which has obvious disadvantages. A number of unions, however, provide for jury trial before a panel selected by lot or by a secret ballot of the membership, with the accused and his accusers having a limited number of challenges. An even larger number provide that a member can be suspended or expelled only by vote of two-thirds or more of the membership. It would seem desirable that both these provisions be adopted where they do not now exist.

As regards the appeal procedure, the essential requirements are simplicity and speed. The procedure should not involve more than two steps and should be completed within a few months' time. The member should be entitled to remain in the union and to hold his job pending the outcome of his appeal—a provision which already appears fairly frequently in minor constitutions. Within the union, appeals should probably be handled not by the national executive board but by a separate judicial body chosen from the general membership. Final appeal might well lie, as Professor Taft has suggested, in a "supreme court" set up by the A.F.L. or C.I.O. In principle, this would offer some of the advantages which citizens of the United States enjoy through their right to appeal certain matters from state to federal courts. Appeal to the union convention, which is now the last step in most unions, is not a useful device because of the infrequency of conventions and the basic unfitness of a large legislative body for judicial functions.

These procedural changes would not provide a complete guarantee of civil liberties within trade unions, but they would go some distance in this direction. It seems highly desirable that the labor movement should itself attempt to bring the judicial practices of all unions up to the level which already exists in the best unions.

RECENT DEVELOPMENTS IN PUBLIC UTILITY REGULATION

STATE REGULATION IN DEPRESSION AND WAR

By Ben W. Lewis
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I. *Introduction*

Periods of great, rapid, and unpredictable economic and industrial change place the greatest demands upon institutions of public control, and afford the most revealing tests of their capacity and performance. For the past fifteen years, state regulation of public utilities—one of our oldest and most completely accepted institutions of control—has been conducted in an atmosphere of "emergency." Since 1929 state regulation, beset by "federal invasion" and "public projects," has battled, successively and without appreciable relief, with "depression" and "war." Whatever the quality of its performance may have been throughout the period, its operation has been conducted in surroundings so dominated by the shrieking and bellowing of rival claims to attention, that students of public control, as well as the general public, have been left quite unfamiliar with its record, and in poor position to appraise any significant implications which the record may hold.

In years past we have often thought that public utility regulation was of consequence, not only because of the importance in our economy of the utility industries, but because it afforded us something of a continuing laboratory experiment in public control—an experiment that might have significant bearing on the issue and the problems of an extension of government regulation into industrial fields hitherto believed to be adequately controlled by the processes of competition. At the moment we are all—controllers as well as controlled—sick of controls; we have rid ourselves of many, and we shall certainly rid ourselves of many more before we begin again to replenish the armory. But, if anything is certain in the world that lies directly ahead—huge corporations, gigantic unions, monopolistic and oligopolistic markets, trade barriers and rigidities and pressures—it is that the issue and the problems of positive government action to direct and to restrain economic activity over wide areas will be with us again—shortly, and urgently. It will be worth while, then, to look back to the old familiar battlefield of state regulation from which in recent years we have been drawn away by the more glittering exhibitions offered by the National Recovery Administration and the Office of Price Administration, and to see what happened to veteran control troops when, with years of training, experience, and tradition behind them, they were given their most exacting assign-

ment. We may control public utilities with a measurable degree of success, of course, and still remain unconvinced that industry over a wider front either should be regulated or that it can be regulated successfully. The situations certainly have as many elements of dissimilarity as of likeness. None the less, we cannot afford to shut our eyes to the light which state regulation of public utilities for the past forty years, and particularly for the past fifteen years, is capable of shedding upon the larger issues that are bound to emerge.

State regulation of public utilities at the close of 1945 is substantially different from state regulation in 1930, and it will be our task to trace briefly and to appraise the changes that have taken place. It will be difficult to assign causes in all instances, but we shall attempt to distinguish between regulatory developments that seem to have been undertaken directly to meet depression and war problems per se, and those which, although they may or may not be traceable to pressures growing directly or indirectly out of the depression and the war, are more appropriately to be thought of simply as changes occurring with the passing of time and the accumulation of experience; i.e., the "secular trend" in regulation.

II. *State Regulation and the Depression*

State regulation responded slightly, haltingly, and stiffly to the challenge of the depression. The "philosophy" of the better staffed and more alert state commissions was that consumers, hard hit by the depression, should be protected from rates originally set to match prosperity conditions, and that public utilities should not be favored above all other industries by being permitted to continue to charge prosperity prices for their wares. There was some talk on the part of the more "advanced" commissions, of the relationship of price rigidities to the prolongation and intensification of depression conditions.

Manifestations of the approach of those state commissions which were stirred to action by the depression took the form of (1) investigations on the commission's own motion where state statutes permitted such aggressive conduct; (2) the employment of temporary rate orders, the substitution of "rate negotiations" for formal proceedings, and the increased use of short-cut methods in order to cut through red tape and render speedier relief; (3) the calling of expert witnesses, from academic and financial circles, to testify on general economic conditions; and (4) the establishment of lower rates of return as "fair" in setting standards for reasonable rates under depression conditions. The results, where these manifestations occurred, were expressed in enforced rate reductions or, more frequently, in refusals of requests for rate increases to compensate for diminished consumption.

This philosophy and these manifestations and results were far from universal; in fact in their articulate and vigorous form they were quite rare. Indeed, an examination of the cases reported in ***Public Utilities Reports*** for the years 1930–35 is startling not for the instances in which rate adjustments to meet, either superficially or basically, the challenge of the depression were under consideration, but, rather, for the volume of rate cases—cases involving the prices of essential services furnished by key industries—in which the modern world's greatest economic cataclysm, then raging, was not even mentioned.

In those cases in which depression conditions were explicitly discussed the inclination was quite general to require utilities to share the economic lot of the community in the interest of "fairness." Some commissions, however, felt that *stable* rates (sometimes identified with constant returns) uninfluenced either by prosperity or depression were to be desired above *flexible* rates (and fluctuating earnings) responsive to conditions outside the industry.[1] Other commissions pointed out that since utilities had not been allowed to enjoy cream in times of prosperity, they should not be subjected to skimmed milk in times of depression.[2] Still another, possibly confusing secular with cyclical considerations, argued that electric utility rates should not follow commodity prices downward in a depression, since the curve of commodity prices in the years before the depression had been upward, while domestic utility rates throughout the period had been going down.[3] On the other hand, some commissions pointed out that utility earnings in predepression years had in fact been very high relative to earnings in other industries;[4] that operating expenses were now much lower;[5] and that, because of the increased purchasing power of the dollar, utility rates and earnings could be reduced without materially changing the "real" earnings of the utilities.[6] It was pointed out in some cases that reduced rates representing the new "lower value" of utility services were quite as much in the interest of the utilities (through maintenance of the demand for their services) as of consumers.[7] Some little point was made of the propriety of adjusting the rate of return element in the legal standard of utility earnings to reflect the change in general eco-

[1] See, e.g., *Smith* v. *Birmingham Gas Co.* (Ala.), P.U.R. 1932 B, 241 (1932).

[2] See, e.g., *Saugus* v. *Lynn G. & E. Co.* (Mass.), 2 P.U.R. (N.S.) 433 (1934); and *Stuttgart* v. *Arkansas P. & L. Co.* (Ark. F.F.T.) 5 P.U.R. (N.S.) 161 (1934).

[3] *City of Detroit* v. *Detroit Edison Co.* (Mich.) P.U.R. 1933 E, 193 (1933). The Commission was severe in its condemnation of "politicians" who incited the unthinking public to demand rate reductions.

[4] See, e.g., *Re Rates and Rate Structures* (N.Y.), P.U.R. 1933 E, 451 (1933), 461.

[5] See, e.g., *Re Electric Rates for Cotton Ginning* (Okla.), P.U.R. 1933 A, 243 (1932); and *Re Cities Service Co.* (Kan.), P.U.R. 1933 A, 113 (1932).

[6] *Re Lone Star Gas Co.* (Okla.), P.U.R. 1933 C, 1 (1933).

[7] *Gehrke* v. *Interstate L. & P. Co.* (Wis.), P.U.R. 1933 C, 154 (1933); and *Re Cortaro Water Co.* (Ariz.), P.U.R. 1932 D, 525 (1932).

nomic conditions;[8] and in one case it was remarked that the most that any business could ask in such perilous times was simply to stay alive.[9]

By far the most elaborate and thoroughgoing attack by any state commission on the problems of utility rates in times of depression with which I am familiar, was that of the Wisconsin Public Service Commission in the *State-Wide Telephone* case.[10] In the hearings preceding, and in the opinion rendered in the first of the temporary orders issued in the case, the Commission made its significant contribution. The rate reduction, of 12½ per cent, was based on a "necessary dividends" rather than "fair return on fair value" analysis. The reduction in itself was not particularly noteworthy, but the nature of the evidence and the character of the Commission's analysis and discussion were decidedly novel. The Commission arranged for the submission of testimony by several departments of the state government and by a group of nationally recognized economists, directed to the prevailing depression in its larger as well as in its local aspects. The evidence bearing on current economic conditions in Wisconsin portrayed the devastating effect of the depression upon employment and incomes of wage earners, upon the prices of farm products and the incomes of farmers, and upon the incomes of manufacturing and retail trade corporations. On the other hand, the evidence relating to revenues, dividends, and surpluses of Wisconsin utilities led the Commission to conclude that the effects of the depression on the larger Wisconsin utility corporations had been slight compared with the effects on all other economic groups in the state. Economists testifying on the general economic situation gave evidence on the subnormal levels of prevailing prices, business activity, production, and employment; and stressed price rigidities and disparities as major factors prolonging and intensifying the depression.

Utility prices were shown to have been extremely rigid and telephone rates in Wisconsin to have moved only upward since 1929. The evidence was clear that regulated utilities in Wisconsin received rates of return in prosperity which compared favorably with returns received by successful unregulated corporations, and that in depression utilities fared much better than other corporations.

The Commission summarized its philosophy of the bearing of depression conditions upon utility rate making in the following terms:

[8] *Re Patrons of Clinton E. L. & P. Co.* (Conn.), P.U.R. 1933 A, 467 (1932); *Re West Jefferson P. & L. Co.* (Ohio), P.U.R. 1933 D, 163 (1933); and *Wauwatosa* v. *Wauwatosa Gas Co.* (Wis.), P.U.R. 1933 D, 489 (1933).

[9] *Department of Public Works* v. *West Coast Telephone Co.* (Wash.), P.U.R. 1933 A, 487 (1932).

[10] See 2 Wis. P.S.C. 106 (1932); 4 *ibid.*, 201 (1933); 6 *ibid.*, 315 (1934); 12 *ibid.*, 1 (1936); and *Wisconsin Telephone Co.* v. *P.S.C. of Wisconsin*, 287 N.W. 122 (1939). I have discussed these cases more fully in TNEC Monograph No. 32, *Economic Standards of Government Price Control* (1941), pp. 18–21.

The existence of an economic crisis which has paralyzed business and impoverished individuals, is relevant in this proceeding in the following respects: (1) It constitutes an added reason for putting into effect an interlocutory temporary order without waiting upon the final results of the investigation; (2) it constitutes authority for a summary procedure . . . ; (3) it affects and measures the value of service rendered by the company, one of the essential factors in determining the reasonableness of rates; (4) it establishes the great increase in the purchasing power of the subscriber's dollar and of the dollar which the company pays its parent corporation in dividends; (5) it affects the reasonableness of the return to which the company is entitled.[11]

It will be appreciated that in this most distinguished attempt by any regulatory commission during depression years to adjust utility rates in response to cyclical factors, no involved theory of pricing in prosperity and depression was advanced. The keynote was "fairness to the parties." It was enough—as an expression of this keynote, and not of any theory of economic allocation-equilibrium—that utility prices be herded into the general vicinity of other prices. We may be very certain that any notion of employing utility prices positively and independently to test theories about the achievement of full use of economic resources did not concern the Commission.

The Commission's attack on the problem of depression rates in this case was not imaginative and spectacular, but it was sound in approach and thoroughly workmanlike in execution—and it is easily distinguishable among state regulatory proceedings of the period for exactly this reason. What might have happened to the blood pressure of the Wisconsin Supreme Court if the Commission had really allowed its imagination any leeway at all in the case is indicated by the following excerpt from the Court's opinion in *Wisconsin Telephone Co.* v. *P.S.C. of Wisconsin* (cited above), in which the Court completely overran the Commission's restrained reasoning and mild rulings, and, incidentally, offered its own critical commentary on the cyclical downswing in economic theory:

Nor do we find that the statute confers upon the commission any power to relieve the economic condition of consumers by taking property away from the utility and awarding it to its patrons. What the statute authorizes the commission to do after it has found that existing rates are unjust and unreasonable is to establish a just and reasonable rate which has been defined over and over again. If the commission were empowered to review the whole internal economy of the state, its postulates and arguments might sustain the conclusion that it reached. Within the limits of its statutory authority, however, it had no right to give dominant weight to economic theory in the face of the statutory command. Recent years seem to have pretty thoroughly demonstrated that economic theory is vague, uncertain, and undependable and that predictions based upon it are not reliable. It seems to be in constant need of repair and readjustment.[12]

The movement to speed up the processes of regulation during the

[11] 2 Wis. P.S.C. 106, 116 (1932).

[12] Just to keep the record straight, I should like to introduce in rebuttal the statement of Mr. Justice Frankfurter, concurring separately in *Driscoll et al.* v. *Edison Light & Power Co.*, 307 U.S. 104 (1939), 122: "The determination of utility rates . . . does not present questions of an essentially legal nature in the sense that legal education and lawyers' learning afford peculiar competence for their adjustment. These are matters for the application of whatever knowledge economics and finance may bring to the practicalities of business enterprise."

depression was more general, pronounced, and vigorous than were the formulation and promulgation of special theories of depression rate making. Again, however, one looks to a handful of states for examples. The setting of temporary rates was not a new device in the thirties, nor is its use confined solely to "emergency" cases.[13] The depression emphasized the need for speedier action on rates than could be had by resort to typical extended "fair value" rate procedure, and several states responded, with and without the benefit of special statutes—and with varying success in the courts—by fixing rates on the basis of immediately available property records after summary proceedings. Provision was made for "final" determinations on the basis of customary procedures and trappings, and for compensation to the utility for any deficiency in earnings received under inadequate temporary rates.[14] Rates fixed by mutual consent of utilities and commissions after "negotiation," in lieu of formal cases, are another example of an old device refurbished and increasingly employed by reason of the depression; and it can scarcely be doubted that the emergency situation generated by the depression also prompted several commissions which had long been content to postpone any rate activity until consumers or utilities made application for changes in rates to institute proceedings resulting in sweeping rate revisions on their own motion.[15]

III. *State Regulation and World War II*

The story of rate regulation by the states during the war can be quickly told. The coming of the war, including the earlier European phases, was expected to increase the difficulties of utility operation and regulation by increasing the costs of production and distribution,[16] and there was considerable speculation as to whether or not state commission regulation would be alert to and fully able to discharge its responsibilities to consumers and utilities during the troublesome period of great demand and rising costs. It was recalled that commission regulation had undergone a trying ordeal in the first World War, when in many cases it had served, in the face of public protests, as an avenue of escape for utilities from the combination of rising costs and fixed-rate franchises.

In fact, in World War II, the problem of rising costs was at no time

[13] Cf. I. R. Barnes, *The Economics of Public Utility Regulation* (New York, 1942), p. 299 ff.

[14] See, among other state laws providing for temporary rates, Sec. 114 New York Public Service Law, Laws of New York, 1934, Ch. 287; and Sec. 309, 310, Pennsylvania Public Utility Law (Act of May, 1937, Laws of Pennsylvania, 1937, No. 286).

[15] The New York Commission was particularly addicted to the "negotiation" device during this period; and the Wisconsin Commission was conspicuously alert to attack rate problems on its own initiative. See also *Re Utility Rates During Economic Emergency* (Pa.), 3 P.U.R. (N.S.) 123 (1934).

[16] See F. X. Welch, "What's Ahead for Utilities—1942?" 29 *Public Utilities Fortnightly* (hereafter cited "P.U.F.") 69 (Jan. 15, 1942).

serious. Most utilities were well fattened at the outbreak.[17] The rise in operating costs was kept well in hand by the nation's general attack on inflation, and by the shortages of materials and supplies which led to an inevitable postponement of much expenditure for maintenance. On the revenue side, the great increase in volume consequent upon war needs and demands, and provided for by fuller use of existing capacity, more than offset most increases in costs. In consequence, few pinches developed, and the general downward trend in utility rates continued throughout the whole period of the war.[18]

Utility pressure for increased rates was not great, and state commissions quite generally gave support to the OPA "hold-the-line" doctrine, both in cases in which the OPA intervened and in those in which the commissions clearly were giving expression to their own anti-inflation sentiments.[19] On the other hand, rate increases in individual cases were by no means unheard of.[20]

There was some resentment expressed by state commissioners at OPA interference, but on the whole the OPA and the state commissions complemented each other's price activities quite effectively throughout the period.[21] There was a handful of controversies between the OPA and the state commissions in cases involving jurisdiction and "automatic" increases under sliding scales and fuel clauses, but these were few and relatively unimportant.[22]

There was, naturally, a slowing up in the movement to force or encourage rate reductions for the purpose of stimulating fuller use of capacity, but rate schedule changes to induce off-peak uses of facilities were not completely halted.[23]

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[17] See F. J. McDiarmid, "What Values Exist in Holding Company Securities?" 29 P.U.F. 21 (Jan. 1, 1942), 26.

[18] See 29 P.U.F. 499 (Apr. 9, 1942); 30 P.U.F. 499 (Oct. 8, 1942); and footnote 48, following. Particularly on the telephone situation, see R. C. Wakefield, "Problems Arising in Regulating the Communications Facilities of the Nation in the Interests of the Present War Effort" (address before the Public Utilities Section of the American Bar Association), 30 P.U.F. 596 (Oct. 22, 1942). And see J. D. Walker, Jr., "Refunds Rather than Rate Cuts During the War," 32 P.U.F. 349 (Sept. 16, 1943), for a discussion of the plan introduced by the Arkansas Commission to provide periodic refunds of excess earnings to consumers, in lieu of rate reductions. For an interesting but quite inconclusive chart designed to reflect the war-rate policies of the several commissions, see the *Proceedings* of the 55th Annual Meeting of the National Association of Railroad and Utilities Commissioners (hereafter cited N.A.R.U.C. *Proceedings*), 134–141 (1943).

[19] See, e.g., *Re Wisconsin Telephone Co.* (Wis.) 43 P.U.R. (N.S.), 193 (1942); and *Re Western Kentucky Gas Co.* (Ky.) 49 P.U.R. (N.S.), 129 (1943).

[20] See, e.g., *Re Greenfield Gas Co.* (Ind.), 45 P.U.R. (N.S.), 101 (1942); *Re United Telephone Co.* (Ind.), 52 P.U.R. (N.S.), 227 (1944); *Re Eastern Indiana Gas Co.* (Ind.), 50 P.U.R. (N.S.), 5 (1943); *Dept. of P.U.* v. *Fall River Gas Works Co.* (Mass.), 43 P.U.R. (N.S.) 129 (1942); *Groton-Ferney Mutual Telephone Co.* (S.D.), 57 P.U.R. (N.S.) 149 (1945); and *Re Pennsylvania P. & L. Co.* (Pa.), 44 P.U.R. (N.S.) 133 (1942).

[21] See 1942, N.A.R.U.C. *Proceedings*, 45, 161; and 1944 N.A.R.U.C. *Proceedings*, 30. See also F. X. Welch, "How Will the O.P.A. Fix Gas and Other Utility Rates," 30 P.U.F. 465 (Oct. 8, 1942).

[22] See 1943 N.A.R.U.C. *Proceedings*, 146, 161, 240, 294; and the District of Columbia Gas cases: *Re Washington Gas Light Co.* (D.C.), 46 P.U.R. (N.S.) 1, 45, 50 (1942); *Byrnes* v. *Flanagan* (U.S.D.C.), 47 P.U.R. (N.S.) 1 (1943); *Washington Gas Light Co.* v. *Byrnes* (U.S.C.

State commissions, in company with federal agencies directly concerned and responsible, gave increased attention to control of the distribution of utility service for war uses,[24] and there was probably some tendency to slow up the introduction or trial of regulatory innovations.[25] There was considerable preoccupation with the question of wartime taxes (whether or not to include them in recoverable operating expenses, and whether or not to reduce rates and earnings in order to permit consumers to retain funds which otherwise would be channeled, almost entirely, through the utility to the federal government in the form of excess profits taxes). Although neither of these developments was of more than transitory significance, it is worth noting that commissions were sharply split on both issues.[26]

It may be concluded, simply, that in *this* war, at least, the quality of state regulation was reasonably steady, if not inspired; and the conclusion is suggested that this kind of job, i.e., "sitting on the lid," where nothing more is imperatively demanded, is peculiarly within the competence of state regulation.

IV. *State Regulation, 1930–45—The Secular Trend*

The whole story of state regulation of public utilities during 1930–45—a very important period in its development, by the way—is not disclosed by a recital and appraisal of those regulatory activities which were designed and undertaken primarily to grapple with the problems of depression and war; indeed, the most significant parts of the story still remain to be told.

It will not be questioned that state regulation generally today is better informed, more expeditious, more accurately pointed and tighter in the seams than it was sixteen years ago. These qualities are not universal

A), 50 P.U.R. (N.S.) 33 (1943); and *Vinson* v. *Washington Gas Light Co. et al.*, 321 U. S. 489 (1944).

[23] See *Re Georgia Power Co.* (Ga), 44 P.U.R. (N.S.) 69 (1942); *Re Wisconsin Electric Power Co.* (Wis.), 56 P.U.R. (N.S.) 242 (1944); and M. R. Kynaston, "Making the War Work for Utilities," 29 P.U.F. 465 (Apr. 9, 1942).

[24] See 1941 N.A.R.U.C. *Proceedings*, 41–45; 526–539; 1942 N.A.R.U.C. *Proceedings*, 156; F. X. Welch, "Should the State Commissions Help Ration Utility Service," 29 P.U.F. 477 (Apr. 9, 1942); and 29 P.U.F. 306 (Feb. 26, 1942).

[25] See N. L. Smith, "The Outlook for Regulation," 16 *Journal of Land and Public Utility Economics*, 386 (1940).

[26] On the inclusion of war taxes as operating expenses to be covered by rates, see *Detroit* v. *Panhandle Eastern Pipe Line Co.*, 3 F.P.C. 273 (1942); *Re Eastern Indiana Gas Co.* (Ind.) 50 P.U.R. (N.S.) 5 (1943); *Re Northern States Power Co.* (N.D.) 55 P.U.R. (N.S.) 257 (1944); *Re Kentucky-Tennessee L. & P. Co.* (Ky.), 46 P.U.R. (N.S.) 277 (1942); 1943 *Annual Rept.*, Connecticut Public Utilities Commission, 11–12; 1942 N.A.R.U.C. *Proceedings*, 295; 1944 N.A.R.U.C. *Proceedings*, 405, 418; and R. W. Peterson, "War Taxes and the Utilities," 32 P.U.F. 281 (Sept. 2, 1943).

On federal taxes versus rate reductions, see particularly the Michigan cases—*City of Detroit* v. *Detroit Edison Co.* (Mich.), 50 P.U.R. (N.S.) 1 (1943); *City of Detroit* v. *Michigan P.S.C.* (Mich. Sup. Ct.), 54 P.U.R. (N.S.) 65 (1944); and *City of Detroit* v. *Detroit Edison Co.* (Mich.), 59 P.U.R. (N.S.) 1 (1945)—and E. R. Abrams, "Federal Taxes or Rate Reductions," 34 P.U.F. 207 (Aug. 17, 1944).

and evenly distributed among the state commissions, and there is, to be sure, plenty of room for improvement even at the highest prevailing levels. Further, it must be borne in mind that we are talking about a *continuing* process in forty-eight states, and that within each a cut in an annual appropriation, a change in governor or in the personnel of the state supreme court, or a resignation of an outstanding commissioner or of a key man on the commission's staff may be quite enough to injure materially the substantive quality of regulatory performance, and to drop a "good" commission into the ranks of the "ordinary." I may add that "ordinary" commissions, taking pride in their complacency, are more of a menace to the future of regulation than are the "bad" commissions whose patent prejudices and deficiencies are likely to evoke early public reaction.

The principal forces contributing to the extent and character of the upward trend, apart from the gradual improving effect of time itself, have been, in my judgment, the institution of the federal utility regulatory agencies (the Federal Power, the Securities and Exchange, and the Federal Communications Commissions) which have closed major gaps in the regulatory system, and the performances of which have served to inspire and set the pace for state commissions (at least those state commissions not wholly immobilized by a morbid fear of "federal invasion"); the institution of major federal power projects, such as TVA and Bonneville; decisions by a reconstituted United States Supreme Court which seem finally to recognize the functional character of regulatory agencies and processes in the modern economic world; and, finally, intensified and more significantly directed activity on the part of the National Association of Railroad and Utilities Commissioners.

As far as the effect of time itself is concerned, it is clear that by 1930, improvement in the quality of state regulation was long overdue. State regulation was in the doldrums at the close of the twenties, and public dissatisfaction was spreading. State commissions pretty generally were resting on their oars, and there was a strong and growing demand, particularly from the larger centers, for a return to the municipalities of regulatory powers which had been transferred earlier to state commissions. There was sentiment, as well, for an extension of municipal ownership and operation of utilities. The slowing down of commission regulation at this time, however, proved to be only a breathing spell, and in the six or eight years immediately following, that is, in the first half of the period under consideration in this paper, regulation by state commissions was almost startlingly revivified. One state commissioner, who was later to become administrator of the federal power project at Bonneville, wrote in 1936: " . . . commission regulation has received new life from our legislators during the past six years. . . . During the past six years we probably have had more new regulatory legislation passed

than in any other similar period in our history."[27] Commenting on the situation four years later in a statement prepared for the Brookings Institution, I was sufficiently struck by the rapidity and sweep of the development to say:

> The movement has not been even, of course, and the resulting picture is far from symmetrical, but the effect has been to leave only a handful of state commissions conspicuously impotent, to round out the powers and facilities of the great bulk of commissions in a degree previously attained only by the more advanced, and to equip and empower a substantial number of commissions as completely as could be desired by the most enthusiastic proponent of commission regulation . . . the trend of regulatory legislation at the present time [1940] is in the direction of a complete acceptance of the administrative commission approach and reinforcement of its processes, inclusion within the regulatory fold of all aspects of utility operation which may affect rates and service, even indirectly, closing channels through which, in the past, regulatory efforts have been thwarted, and placing the entire regulatory process on a factual, business-like basis.[28]

Fortunately, however, I took care to distinguish between the outline of the regulatory structure and the actual practice of regulation—a distinction which we must be careful to draw in appraising the trend from 1930 to 1946. In 1940, I added:

> . . . an account of the new legislation affecting utilities commissions during this period does not convey an accurate impression of the change in regulation, since many of the new powers remain unused in the hands of indifferent commissioners, and many commissions are making greater progress in regulatory practice under old general powers than some of their contemporaries are making under new specific grants. . . .[29]

To turn to specific identifiable forces bearing on the regulatory trend: the reconstituted FPC, and the newly established SEC and FCC were thrust by Congress into breaches in the regulatory line which by the early thirties had become too notorious to be longer ignored—notably the areas of interstate wholesale rates, intercorporate contracts, and the structure and operation of utility holding company systems. In discharging their duties, the federal agencies have displayed technical skill, imagination, and driving force in a measure fully commensurate with the responsibilities and opportunities of their key positions. By dealing firmly and effectively with phases of utility operation which lie on the fringes of and are inextricably interwoven with those operations which the states alone must control, by their substantive accomplishments, and by the example which they have set of competence in regulatory performance, the federal commissions, in the short space of time since their inception, have markedly influenced the quality of regulation by their associates in the states.

[27] Paul J. Raver, Report on "Progress in Public Utility Regulation," 1936 N.A.R.U.C. *Proceedings*, pp. 361–362. It might be noted that several states established official committees in the late twenties to investigate and make recommendations on public utility regulation. The New York investigation, resulting in four volumes (3,045 pages) of reports, hearing, and exhibits, was particularly thoroughgoing and complete.

[28] Lyon, Abramson, and Associates, *Government and Economic Life* (The Brookings Institution, 1940), Vol. 2, pp. 643–644. See the description of the Pennsylvania Public Utility Law of 1937, *ibid.*, 645 ff.; and for a recent survey of state commission powers and functions, see I. R. Barnes, *op. cit.*, pp. 176–194 and 205–217.

[29] Lyon, Abramson, and Associates, *op. cit.*, p. 643.

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It is undoubtedly true that state regulation has failed to develop to its fullest in the past, at least partially because of its immunity from competition and its freedom from anything resembling an objective test of its performance. Both of these deficiencies were reduced in the period under survey. Bonbright has commented that:

> . . . from the standpoint of immediate influence on electric utility rates, the [Federal Power] Commission's most significant accomplishment has been its annual publication of "Typical" electric bill comparisons, whereby the retail electric rates charged in one community may be compared to the rates charged elsewhere throughout the nation. Despite the fact that these comparative bills have seldom been recognized by courts or commissions as valid evidence of the reasonableness of the rates charged by any one company, they have had a potent effect in inducing utilities to reduce rates shown to be out of line with the general trend.[30]

There is plenty of reason to believe that the rate comparison studies have played a part, too, in stimulating state commissions to move aggressively toward power rate reductions. In a very real sense, of course, state commissions, as an integral part of the system of regulated privately-owned public utilities from which the consumers of this country obtain the great bulk of their utility services, are "on trial." Until recent years, however, the trial has been largely of an academic character because of the absence, on any significant scale, of an acceptable alternative. But with the institution of the Tennessee Valley and Bonneville projects our state public utilities commissions no longer live in an insulated world. "Public projects, operating without restraint and under a pricing philosophy which seeks revenue through expanded rather than retarded output, offer a tremendous challenge" to private utilities and to the state commissions which set the limits within which utility dealings with consumers are conducted—and this whether the public projects be regarded as "yardsticks," "clubs," or "divining rods."[31]

Students have realized for many years that state regulation can never attain its full stature until it is free to set its sights beyond the mere protection of mystically defined property rights in case-by-case adversary litigation, and can come to rest its continuing administrative processes upon records and market realities rather than upon revelation—until, in short, it becomes less attractive for utilities to seek earnings by exploiting the regulatory systems of the states than by getting down to the business of producing and marketing utility services. It will

[30] J. C. Bonbright, "Contributions of the Federal Power Commission to the Establishment of the Prudent Investment Doctrine of Rate-Making," 14 *George Washington Law Review*, 136 (Dec., 1945), 149. For further comments on the use and limitations of comparative rate studies, see 1941 N.A.R.U.C. *Proceedings*, 369 ff.

[31] See my "The Role of the Federal Power Commission Regarding the Power Features of Federal Projects," 14 *George Washington Law Review*, 96 (Dec., 1945), 101; and see 1941 N.A.R.U.C. *Proceedings*, 62; and *Report of the Joint Committee Investigating the TVA*, 76 Cong., 1st Sess., Sen. Doc. 56, at 198. In my judgment it is in its disclosures of the hitherto hidden and unexplored reaches of demand elasticity rather than in any "yardstick" demonstration of the lower costs of public operation, or in brandishing the "club" of impending system competition, that the TVA is making its most significant contribution.

hardly be disputed that the position on rate valuation taken by the United States Supreme Court from the late nineties of the last century until nearly the close of the fourth decade of the present has been a most powerful force adversely conditioning the attitudes and the regulatory policies of the state commissions. The edge of the mystic veil was lifted, hesitantly, by the Court in *Los Angeles G. & E. Corporation* v. *Railroad Commission of California* (289 U.S. 287), 1933, and in *Lindheimer* v. *Illinois Bell Telephone Company* (292 U.S. 151), 1934; and was apparently thrown completely aside in *F.P.C.* v. *Natural Gas Pipe Line Company* (315 U.S. 575), 1942, and in *F.P.C.* v. *Hope Natural Gas Company* (320 U.S. 591), 1944. (I say "apparently" because one must rely upon appearances, and the lighting effect in these proceedings was not too good. I will suggest that anyone having more than a passing acquaintance with the vagaries of the judicial mind will not be among the first to predict that the world has looked its last upon the veil.)

I shall have something to say presently about the substantive problem of rate valuation involved in these decisions. I should like here to stress the proposition that the Supreme Court seems to have come at the moment to accept the view of Chief Justice Stone (dissenting in *United States* v. *Butler*, 297 U.S. 1, 87; 1936) that "courts are not the only agency of government that must be assumed to have capacity to govern," and to begin, at least, to interpret its own function under the "due process" clause of the Constitution in terms of procedure as distinct from substantive policy. It may be, thus, that the period we are discussing has seen the beginnings of the emancipation of state regulation from the shackles of judicial dictation on matters of policy. It should not escape us, however, that if this is true, state regulation has been deprived as well of its hardest working alibi. It would appear henceforth to be free; it is also "on its own!"[32]

We have spoken of developments in valuation for rate making in our comments on the newer attitude of the Supreme Court toward administrative agencies. It remains to treat the matter directly. As a result both of state and federal action, valuation for rate-making purposes—the most confused and confusing concept in the history of regulation—seems finally to have permitted itself to be roped and tied—how securely remains to be seen. I shall not re-regale you with a diatribe upon the iniquities of reproduction cost and fair value, or attempt to estimate the full measure of the damage they have done to effective regulation, in terms of cost, delay, acrimony, and looseness. Under the Constitution

[32] For summaries of other court decisions indicating that the judiciary is attaching increased weight to Commission findings, see 1941 N.A.R.U.C. *Proceedings*, 482; 1942 N.A.R.U.C. *Proceedings*, 243; and 1943 N.A.R.U.C. *Proceedings*, 283. Another related source of delay and confusion in the matter of judicial review was eliminated by the passage in 1934 of the Johnson Act (48 Stat. L. 775).

as presently interpreted it seems at last to be the case that commission-fixed rates do not violate the "due process" clause of the Constitution if they are calculated to produce earnings high enough to support the utility's financial structure even though they are not high enough to provide a fair return upon the reproduction cost of the utility's property, or upon some hybrid trance-revealed "fair value" figure lying between reproduction cost and actual investment, or, for that matter, even upon the actual investment figure itself. It is probably not the case, however, that the Constitution requires the financial structure of the utility to be supported by earnings irrespective of the underlying investment. It seems certain, then, that constitutionality will be clearly satisfied if a commission bases its rate level findings upon prudent investment, without regard to reproduction cost[33]—a tremendous saving of time and expense and a tremendous gain in accuracy and certainty. There are still problems of interpretation; e.g., just what treatment shall be given to "investment" in property constructed from (excess?) earnings, etc.; but these are slight indeed in comparison to the burden of "fair value" with which utility regulation has been saddled since 1898 and which appears at last to have been lifted. The millennium is still ahead of us, but at least the states are free to remodel a standard which we have known to be loose both in conception and execution into a standard which is loose only in conception.

It must be borne in mind that "fair value" has not yet been completely routed from state regulation. Some state commissions will prefer to continue to employ the concept, and some will feel constrained to continue its use by reason of their interpretation, or the interpretation by the courts of their states, of their own state laws.[34] The point to be emphasized is simply that many state commissions have worked actively during the years under review to supplant guess-work in utility rate valuation by accounting records; and by reason of their efforts, pointed and strengthened by the FPC, the Supreme Court in the *Pipe Line* and *Hope* cases (cited above) has finally freed utility regulation from the *constitutional* necessity for living any longer with reproduction cost and "fair value." If we are interested in an exact allocation of credit, we shall, of course, note that the final attack was spearheaded by the FPC, but we shall not overlook the earlier cases coming to the Supreme Court from the Illinois and California Commissions and the pioneering work done by the Commissions of Massachusetts, New York, California, and Wisconsin.

[33] See R. L. Hale, "Utility Regulation in the Light of the Hope Natural Gas Case," 44 *Columbia Law Review*, 488 (1944).

[34] For a suggestive survey of the situation, see C. A. Esser, "State Laws in Relation to the Hope Natural Gas Decision," 34 P.U.F. 69 (July 20, 1944). For a distinctly hopeful early round-up of cases, see 1944 N.A.R.U.C. *Proceedings*, 505.

The other important development in valuation during the period was the lethal blow delivered by the Court to the perennial troublemaker, going value—now (apparently) gone for good as a constitutional requirement in utility valuation. Lip service is still paid to the term in the highest quarters, but it receives no material sustenance there;[35] it draws its meager and dwindling nourishment entirely from the crumbs which it can gather, as a hanger-on, from a few state commissions and courts still unwilling to believe that the age of black magic is past.[36]

There have been and will continue to be some interesting and significant repercussions from the substitution (or, to be more nearly exact, the *possibility* of the substitution) of prudent investment for "fair value" or reproduction cost. With the advent of a quickly ascertainable, accurate rate base, much of the drive for temporary rates and for negotiation as a procedure for rate making may be expected to disappear. There will still be employment for temporary rates during test periods, but the need will lessen; and rate negotiations should certainly dwindle in volume. Rates set by negotiation are an acceptable substitute for rates set by order only if the order is bound to be delayed, disputed, and loose; orders based on prudent investment need possess none of these qualities, and there is no longer need to run the risks inherent in the negotiation procedure.[37]

The decision in the *Hope* case also opens the door to a fuller development of the treatment of the "rate of return" concept that was gotten under way during the decade just past. With the rate base in an indeterminate state, the theory and practice of rate of return determinations were bound, similarly, to be speculative and fuzzy. But with the rate base firmly established on certain and familiar ground, it is to be expected that the trend, already begun, of subjecting the rate of return concept to increasingly discerning analysis in light of its function in rate making will continue.[38] It will be related, by commissions which have taken the pains to establish prudent investment rate bases, more carefully to the objectively determined financial needs of the particular utilities before the commission and to the pertinent features of the contemporary and prospective money markets from which utility capital is drawn. With a firm rate base, commissions can devote themselves energetically to the analysis and study of factors properly bearing upon the determination of the rate of return, as an important independent factor

[35] See *Federal Power Commission* v. *Natural Gas Pipe Line Co.*, cited above.
[36] See *Re Northern States Power Co.* (N.D.), 55 P.U.R. (N.S.) 257 (1944), 265.
[37] See Lyon, Abramson, and Associates, *op. cit.*, 718, n. 186.
[38] See C. O. Fisher, "Another Look at the Utility Rate of Return," 36 P.U.F. 99 (July 19, 1945). Further on the rate of return see FCC, "Factors Underlying the 'Rate of Return' in Public Utility Regulation as Disclosed in Court and Commission Decisions" (1938); and B. J. Sickler, "The Federal Communication Commission's Rate-of-Return Studies," 15 *Journal of Land and Public Utility Economics*, 137 (1939).

in the establishment of rates, with no fear that in treating the rate of return as an independent factor they will be doing violence to any sensible concept of total return. Total return, under the new dispensation, can become more nearly the result of the application of the rate of return to the rate base rather than, as in the past, the determinant of the rate of return—the amount of the "fair value" element in the total return having first been revealed by second sight.

Finally, the *Hope* decision will give great impetus to the movement quite generally under way in the states by the outbreak of the war for the establishment of uniform systems of accounts and the building up and maintenance of continuing, original cost property records. Commissions will do well, of course, to heed Mr. Justice Jackson's critical comment in his dissenting opinion in the *Hope* case, to the effect that "to make a fetish of mere accounting is to shield from examination the deeper causes, forces, movements, and conditions which should govern rates."[39] On the other hand, utility regulation has been mired since its inception in a morass of preconceptions, conjectures, and incantations, and it has made real progress only at those points and in those directions where it has been able to proceed on the firm ground of recorded facts. There has been a high degree of collaboration in accounting matters between the state and federal regulatory commissions, effected to a considerable extent by the N.A.R.U.C.; and uniform accounting systems prescribed by the commissions are now widespread in the utilities industry.[40] Led by the Wisconsin and New York Commissions (1931 and 1933, respectively), the FCC in 1935 and the FPC in 1936 promulgated uniform systems of accounts, designed to establish on books of record the original cost (estimated if not known) of utility property to the company first devoting such property to the public service. By 1938, twenty-seven states had adopted systems for electric utilities in line with this pattern. A number of states have been engaged actively for the past several years in building up continuing property records for the utilities under their jurisdiction.[41]

Finally, in the general area of rate-accounting activity, very substantial strides were made by the states in the matter of depreciation control. Here, too, much remains to be done, but there has been a clearly evident tendency in late years to get down to brass tacks, to break the depreciation concept into simple manageable elements, and to get rid of the table tapping which has persistently characterized its consideration in regulatory proceedings. It seems altogether likely that before

[39] Cited above, at 643, note 40.

[40] By 1940, all but ten of the states had imposed uniform systems on the utilities subject to their jurisdiction. I. R. Barnes, *op. cit.*, p. 249.

[41] See FPC *Eighteenth Annual Report* (1938), 14; FPC *Nineteenth Annual Report* (1939), 18; and New York P.S.C., *Annual Report, 1938*, Appendix A.

long it will be common practice in the states to deal consistently with the twin problems of accrued depreciation and annual depreciation—at least in the same case. I do not mean to suggest that there is but one correct answer to each of the problems raised by depreciation accounting and control, but it seems pretty clear that the principal barrier to more effective treatment of depreciation by commissions in the past has been lethargy rather than the mere fact of different expert opinions, strongly held and ably defended, on the technical and policy issues involved. The N.A.R.U.C. Committee on Depreciation may quite properly take a lion's share of the credit for the progress which has been made recently, and which is in prospect, although it must be added that the N.A.R.U.C. Committee seems to be very considerably ahead of the N.A.R.U.C. membership, both in an understanding of and action on a really workmanlike depreciation program.[42]

There has been perceptible but by no means universal breaking down of the hostile attitude of the state commissions toward "invasion of states' rights" by the federal regulatory agencies. State commissions came increasingly to look upon federal regulatory activity as complementary to their own, but it is still true that diatribes against federal invasion occupied the attention of the state commissioners in their annual meetings in a measure only slightly less than their attention was absorbed by its primary concern—the election of the second vice-president.[43] I should add that the presence at the Association meetings of the members of the federal commissions and the presence on the Association's technical committees both of federal commissioners and members of their staffs are strong forces working for mutual understanding and effective co-operation. These informal arrangements have been reinforced in recent years by actions taken under Part II, section 209 of the Public Utility Act of 1935 (49 Stat. L. 803), authorizing the FPC to undertake investigations at the request of state commissions, and requiring it to make all of its reports available to them, to lend members of its staff as expert witnesses to the states, to hold joint hearings and conferences, and to set up joint boards in matters of interstate regulation to be vested with the full authority of the Commission. Similar provisions in support of federal-state co-operation are to be found in section 410 of the Communications Act of 1934 (48 Stat. L. 1064); and in the Natural Gas Act of 1938 (52 Stat. L. 821).[44]

Public utility regulation is undertaken because certain industries have peculiar technical characteristics which are reflected in their price poli-

[42] See 1944 N.A.R.U.C. *Proceedings*, 59–125; 334–362.

[43] See, e.g., 1943 N.A.R.U.C. *Proceedings*, 195–232, and 440–447. But see, *ibid.*, 432–440.

[44] See, e.g., 1942 N.A.R.U.C. *Proceedings*, 116 ff.; and 1944 N.A.R.U.C. *Proceedings*, 246 ff., and 441 ff. See also Paul A. Walker, "How Co-operation Works in Communications Regulation," 32 P.U.F. 267 (Sept. 2, 1943).

cies—policies which, in the public interest, we cannot permit to be employed. Competition in this field would be economically wasteful; yet the results of pure competition would be as desirable in this area as elsewhere in the economy. The problems are, then, to determine a return which conforms to competitive standards, to insure that the total investment is such that the return does not conceal underutilization or waste, and to insure that the form of rates (a concept which has no equivalent in a purely competitive industry) permits the first two objectives to be achieved. Since the "proper" return on the "correct" investment is integrally related to the pattern of rates actually established, it follows that, to be truly and completely effective, utility regulation should be dynamic rather than static.[45] Pricing is a *positive* function.

But, our regulatory processes are geared to the performance of restrictive, protective, corrective functions, not to the dynamic tasks of promotional pricing. Regulation sets the over-all boundaries beyond which the level of utility rates may not go, and when it essays into the realm of specific rates (the structure of rates) it moves cautiously to prevent "unreasonable" discrimination rather than vigorously to induce consumption. And, by its very nature, it can move only as a supervisor; never as a participant in the market. The fact that regulation is compelled by the inherent nature of its task to force the measure of acceptable aggregate rates (a *relative* concept) into an absolute cost-plus-return-on-existing-investment strait jacket is clearly indicative of its static, protective approach.

The fact is that we should like regulation to be so constituted that under its active direction and driving force the utility industry would be bound to furnish not just "enough" service at prices which are "not improper" but the utmost in service at the lowest possible prices consistent with the continuous furnishing of such service by a strong, healthy, and profitable utility industry in the midst of a continuously fully employed economy. The nearest approach which state regulation makes to this objective is to be found in the case of those commissions, few in number, which maintain continuous scrutiny of utility earnings and rates, and which move on their own initiative to order rate reductions whenever earnings provide something in excess of a "fair return." The reductions, calculated on the basis of past consumption (i.e., demand induced by previous higher rates, with no allowance for demand elasticity), are designed to wipe out the excess. It is currently believed that the courts have barred the use of the concept of "elasticity," but it cannot be shown that state commissions have ever pressed the matter

[45] I am indebted for suggestions at this point to my former colleague, James R. Nelson.

upon the courts in any very determined fashion.[46] If, in addition, these commissions work actively to persuade utilities to adopt rates contrived to explore the lower levels of consumer demand in search of the particular demand and price pattern which will afford the maximum service consistent with the required earnings, we are in the presence of regulation at its current best—and its rarest.

The period under review saw some aggressive activity of state commissions along the lines just suggested (continuous supervision and required reduction of excessive rates, and the promotion of promotional rates)—indeed, some increase in such activity.[47] And it is true that utility rates, conspicuously in the electric utility industry, have been falling quite steadily, in good times and in bad and in peace and in war, for the past twenty-five years, and that the end of the period finds the electric utility industry characterized by "a degree of financial soundness unprecedented in its history."[48] It is also true, however, as it was at the beginning of the period, that state regulation is primarily concerned with protecting consumers against utility excesses statically defined, rather than with *maximum* positive performance by the industry. The wall of protection thrown by current state regulation around consumers permits them to rest comfortably in comparative security against gross extortion and discrimination; but on the other side of the wall utilities, too, can rest in comfort and ease. Regulation at its best need not prevent progress, efficiency, and dynamic promotional pricing; but regulation through its own processes can hold out no promise of their attainment except intermittently and in isolated cases.

State regulation increased the quality of its protective performance quite measurably in the fifteen years just past; there are more "good" commissions now than there were in 1930, and the best commissions are now in better shape to do a workmanlike job. But it is still a discouraging business to read the annual reports of most state commissions, and to go through the reports of their decisions and opinions in formal cases. Phrases still constitute a large part of their stock in trade, and, while they have come into possession of some new tools and equipment,

[46] See *West Ohio Gas Co.* v. *P.U.C. of Ohio* (No. 2), 294 U.S. 79 (1935). The typical legalistic, restrictive approach is found in the Ohio Commission's approval of rates to which it found the utility "entitled" under the law, accompanied by an admonition to reduce rates voluntarily to stimulate consumption, on the ground that the rate increase might defeat its own purpose. Appeal of *Van Wert Gas Light Co.*, 1925 Ohio P.U.C.R. 8, 10. Note, however, that the N.A.R.U.C. Committee on Progress in Regulation has urged since 1942 an "extension of the promotional rate concept so that rates will be established at levels necessary to accomplish a predetermined increase in use of the service." 1944 N.A.R.U.C. *Proceedings*, 505.

[47] For examples, see my account of the rate level and rate structure activities of the Wisconsin, Illinois, and New York Commissions in "Economic Standards of Government Price Control" (cited above), at pages 12, 25, and 34.

[48] See FPC *The Financial Record of the Electric Utility Industry 1937–1944* (1945), p. 2; and FPC *Typical Electric Bills in Cities of 50,000 Population and More*, 1945, p. vii.

they are still trying to fit static concepts to elusive realities which I greatly fear will always, by their very nature, defy the best efforts of which state regulation is capable.

V. *Conclusion*

What is the upshot of all this, both for the future of utility regulation, and, just possibly, for the regulation of industry on a wider front if, in the future, we should come to believe that with a desired development of large-scale collective enterprise under the corporate form it is impossible to maintain an effective degree and quality of competition, and, hence, that we must cast about for substitute forms of control?

As far as the future of state utility regulation is concerned, the prospects within definitely named limits are not too dismal. If we set as our goal the establishment of rates which will induce "about enough" investment to provide "about enough" service, and which will not exact too much too much from utility users in static, local monopoly situations throughout the country, we can achieve it. We do not have it yet, by any means, but it is attainable. We can have, too, a plodding adjustment of these rates to major movements in the levels of prices and of business activity and consumer incomes. Intermittently, unpredictably, and, as far as regulation is concerned, by chance, we may have more.

I will suggest, however, that after forty years we are in position to realize the inherent limitations as well as to appreciate the possibilities of the regulatory process, and that we will do better to set our regulatory sights within boundaries of possible achievement than to shoot wildly at the moon. It is pretty clear, for example, that beyond shifting utility prices upward and downward with price levels in general we cannot employ utility pricing under regulation as an antidepression, fuller-employment measure. The proposal to make use of utility rate regulation as a positive instrument, in collaboration with other public measures, to promote a higher general level of use of resources, with particular reference to depression situations, cannot, it seems to me, be hopefully entertained.[49] The facts that our regulatory commissions are spread among the several states (with correspondingly limited jurisdiction and facilities), while the problem to be attacked is nation-wide if not world-wide in extent; that regulatory processes cannot be timed to factors related solely to the full employment objective (even if, in any event, they could be made sufficiently flexible); that criteria and information suitable to guide the positive actions (as distinct from the general sympathies and inclinations) of the responsible state commissions are not

[49] See the discussion in J. D. Sumner, "Public Utility Prices and the Business Cycle," 21 *Review of Economic Statistics*, 97 (1939); Donald Wallace, "Kinds of Public Control to Replace or Supplement Antitrust Laws," 30 *American Economic Review, Papers and Proceedings Supplement*, March, 1940, 194; and discussion by M. de Chazeau, *ibid.*, p. 213.

even potentially available—all stand as insuperable barriers to the setting of the promotion of full employment of resources in general even as a remote goal for state regulation. The action by any one commission would be, at best, so pitifully uncertain and fragmentary as to be utterly quixotic. As if these considerations were not enough, there remains the hurdle of constitutionality; and no modification of the Fourteenth Amendment short of its complete elimination would permit regulatory authorities to manipulate the rates (and earnings) of privately-owned utilities in response to factors so divorced from the financial interests of the owners. And even though constitutional limitations were not present, commissions concerned at all over the flow of private investment into the utility field would scarcely tie their rate policies and programs to objectives so absolutely certain to repel private capital.

Of much greater concern, however (because the full employment objective of private utility price regulation has never been more than an academic speculation), is the fact that under state (and even under state plus federal) regulation we cannot realistically set as an attainable goal the achievement of optimum consumption of utility services. We can exhort regulation to this end, and such consumption may in fact occur upon occasion. Regulation need not be expected to bar full consumption of service if it is induced by other more positive forces, such as competition from public projects, or if it happens to eventuate from marketing-pricing policies adopted quite voluntarily by a utility management. Indeed, regulation may consolidate and prolong such a result. But the demonstrated capacity of state regulation as an instrument of control does not go beyond the reasonably effective performance of protective and restrictive as distinct from positive, dynamic, promotional functions.

Promotion—the lowering of prices in an attempt to attract customers in uncertain and uncharted markets, and to tap prospective demands which may never materialize—is a risky business. Oswald Knauth was quite correct when he wrote recently: "It takes courage as well as sagacity to gamble on a rate of demand that will bring forth the volume needed for lowered costs."[50] He may also have been correct when he added: "These qualities are conspicuously lacking in the administering of public utility rates—railroad, electricity and gas—all of which are managed by technicians in contrast to merchants." Regulation is precluded by its essential nature (as well as by the federal Constitution) from *forcing* utility managements to assume risks of the kind and degree which the managements of unregulated enterprises voluntarily assume in the regular course of competitive business conduct. In an over-all sense, of course, regulation is entitled to proceed under the assumption

[50] "Monopoly Reconsidered," LX *Political Science Quarterly*, 563 (1945), 566.

that ownership capital invested in the utility field has an obligation to perform the risk-bearing functions associated with venture capital in the general business and industrial area; it may be said to have "held itself out" to perform these functions. To argue from this, however, that utilities have voluntarily undertaken to follow the whims and fancies of regulatory commissions in the matter of promotional pricing of particular services is to extend the assumption far beyond the facts. To paraphrase the quotation above: "It takes courage to gamble on the sagacity of *someone else* to hit upon a rate of demand that will bring forth the volume needed for lowered costs—particularly when the 'someone else' stands to lose nothing by his mistakes." Potential investors are not likely to select the utility industry for their ventures into the realm of enterprise risk if they are required to surrender, without recourse, the making of positive decisions involving matters of market judgment and "hunch" (the very stuff of which enterprise risk is composed) to regulatory authorities who can be indifferent to profits and who bear no responsibility for mistakes. Regulation can urge and exhort, it can seek to induce by such cautious and cumbersome devices as sliding scales and "objective rates," but it cannot, without destroying itself, *compel* the vigorous, promotional pricing of utility services which is essential to their full consumption.

The moral, it seems to me, is pretty clear. Regulation has a job to do within a limited field, and it can reasonably be held to a competent performance of that job. It should not be held to more. If we demand more within the field we shall have to supplement regulation with other forces—public projects, for example, or subsidies. Beyond the field, in the general industrial area where the effectiveness of what remains of competition is being increasingly questioned as a control device, the visibility is low. But, if the history of state regulation for the past fifteen (or forty) years has any meaning, the effectiveness of competition will have to be badly impaired indeed—beyond any possibility of revival—before we can accept with eagerness a program to supplant it with "fair return" regulation—even our long-awaited "fair return on prudent investment."

RATE REGULATION BY THE FEDERAL POWER COMMISSION

By Nelson Lee Smith
Federal Power Commission

It seems to me appropriate that a discussion of rate regulation by the Federal Power Commission is among the subjects to be considered in this session devoted to recent developments in public utility regulation. Even the most caustic critics of the Commission will scarcely contend that its rate-making and related activities have been so far without effect upon the course of public utility regulation in recent years that they should be disregarded. The complaint from such sources is quite the opposite. Friends of the Commission and foes, alike, will agree that in the last decade it has exerted an important and far-reaching influence on the development of the law and technique of public utility rate making which cannot be ignored, however widely they may disagree as to whether this influence has been good or bad.

In this paper it is my purpose to afford a factual basis for judgment as to both the extent and the desirability of the Commission's influence upon developments in the utility rate-making field, as well as to indicate some of the more troublesome economic questions which have arisen in the Commission's application of its broad policies to particular situations. I shall, therefore, sketch briefly in turn: (1) the scope of the rate-making jurisdiction of the Federal Power Commission, (2) the general approach and methods followed by the Commission in its exercise of this function, and (3) some of the specific problems which are encountered in the concrete practice of rate regulation by the Commission.

Scope of Rate Jurisdiction

Although the Federal Power Commission was created by the Federal Water Power Act of 1920,[1] its present, comprehensive jurisdiction over interstate electric and gas wholesale rates is of much more recent origin.

The original Act, which was essentially a conservation measure, provided for the exercise of federal control over water-power projects on federal public lands and reservations and in the waters over which Congress has jurisdiction under its authority to regulate interstate and foreign commerce. This control was effected through the licensing of such developments and improvements by a Commission consisting of the Secretaries of War, Interior, and Agriculture, with a small staff detailed from those Departments working under the direction of an

[1] 41 Stat. 1063, approved June 10, 1920, 16 U.S.C. 791–823. This Act, as amended, became Part I of the Federal Power Act, approved August 26, 1935, 49 Stat. 838, 16 U.S.C. Supplement IV, 791a–825r.

executive secretary.[2] The Act provides that licensee utilities shall abide by the reasonable regulation of rates for energy moving in intrastate commerce by appropriate state agencies. The licensee is required to agree, however, as a condition of the license, that in the absence of such state authorities the Commission shall have jurisdiction to regulate intrastate rates to consumers.[3] As to energy moving in interstate or foreign commerce it is likewise provided that rates to the public, including the charges of subsidiaries controlled directly or indirectly by the licensee, shall be just, reasonable, and nondiscriminatory. Jurisdiction to enforce this requirement, either upon complaint or upon its own initiative, is conferred upon the Federal Power Commission whenever "any of the states directly concerned has not provided a commission or other authority to enforce the requirements of this section within such state . . . or such states are unable to agree through their properly constituted authorities. . . ."[4]

Since regulation of electric rates—commonly by state commissions and in some instances through municipal action—has been provided for generally throughout the areas in which licensed projects are located, it is not surprising that this initial grant of rate-making authority to the federal agency has to date been of virtually no direct usefulness.[5] The Act affords, however, a statutory foundation for the rejection of "fair value" as the rate base for licensed projects, since it provides, as a condition of the license, that for purposes of rate making, net investment shall be used without allowance for good will, going value, prospective revenues, license value, or water rights and lands in excess of their actual reasonable cost at the time of acquisition.[6]

Under the decisions of the United States Supreme Court, particularly in the *Attleboro* case,[7] it became clear that the states were without constitutional authority to regulate interstate wholesale utility rates. Congress met the need for the exercise of federal jurisdiction in this field by granting rate-making authority to the Federal Power Commission, which in 1930 had been converted from an ex officio basis to an

[2] The staff thus detailed from the three Departments became the Commission's own staff on July 1, 1928, under authority of independent offices act, 1929, approved May 16, 1928. See *Ninth Annual Report of Federal Power Commission*, 1929, p. 13.

[3] Sec. 19.

[4] Sec. 20.

[5] In 1932, upon informal complaint regarding two Florida licensees (Acklawha Reclamation Farms and West Florida Power Company) the Commission instituted an investigation, which was subsequently abandoned because of jurisdictional and practical difficulties. In 1940 the Commission ordered a $350,000 reduction of the interstate rates of the Safe Harbor Water Power Corporation, 2 F.P.C. 182. The order, however, was set aside on appeal for lack of jurisdiction, *Safe Harbor Water Power Corp.* v. *Federal Power Commission*, 124 F. 2d 800 (1941); certiorari denied, 316 U.S. 663 (1942). The rates of this Company are again before the Commission in an investigation pending under the Federal Power Act, Docket IT-5914.

[6] Sec. 14.

[7] *Public Utilities Commission* v. *Attleboro Steam and Electric Co.*, 273 U.S. 83 (1927). See also *Missouri* v. *Kansas Natural Gas Co.*, 265 U.S. 298 (1924).

independent agency.[8] The Federal Power Act of 1935 gave the Commission jurisdiction over the interstate transmission and sale of electric energy. Similar authority over the interstate transportation and sale of natural gas was conferred upon the Commission by the Natural Gas Act of 1938.[9] Both statutes restrict the Commission's rate jurisdiction to sales made at wholesale—that is, for resale as distinguished from ultimate public consumption—with the result that rate control by the Commission extends primarily to transactions between utility companies.[10] Both also make plain the Congressional intent to assist and supplement, and not to encroach upon, local rate regulation. The purpose was to fill a jurisdictional gap through which effective rate control could be, and had been, thwarted by the maintenance of unreasonable interstate rates for sales to local distributing utilities. It is these rates, which are beyond the constitutional reach of the individual state commission, that are subject to the jurisdiction of the Federal Power Commission.

In providing for the regulation of interstate rates, Congress used practically the same language in the Federal Power[11] and Natural Gas[12] Acts. And it followed the usual pattern of such regulatory statutes in the United States. "All rates and charges . . . and all rules and regulations affecting or pertaining to such rates and charges shall be just and reasonable." Any rate that is not "just and reasonable" is declared to be unlawful. There shall be no "undue preference or advantage" or "any undue prejudice or disadvantage," nor shall there be "any unreasonable difference in rates, charges, service, facilities, or in any other respect, either as between localities or as between classes of service." It is for the Commission to determine whether particular rates are just, reasonable, and nondiscriminatory. Whenever it finds, after a hearing upon its own motion or upon complaint, that rates are defective in any of these respects, the Commission is directed to determine and fix by order the just rates which are to be observed thereafter.[13] The Commission is also empowered to suspend rate changes, pending investigation, for a period of not more than five months.[14] If at the end of that time the proceeding

[8] 46 Stat. 797, approved June 23, 1930.

[9] 52 Stat. 833, 15 U.S.C. 717–717W, approved June 21, 1938.

[10] The Commission has also been given limited jurisdiction over the rates at which power generated at certain federal projects, such as Bonneville (50 Stat. 731, approved August 20, 1937) and Fort Peck (52 Stat. 403, approved May 18, 1938), is sold. Its authority is not of a continuing character, however, but is restricted to confirmation and approval of rate schedules initiated by the agencies operating the projects. Since "Rate-making Policies of Federal Power Projects" is to be treated in another paper during this session, this somewhat confused and unsatisfactory situation will not be discussed herein.

[11] Secs. 205 and 206.

[12] Secs. 4 and 5.

[13] The Commission, however, is expressly prohibited—Sec. 5 (a)—from requiring an involuntary increase of natural gas rates, the apparent purpose of this provision being to give natural gas competitive freedom on a price basis with other fuels in areas where it is available.

[14] Again the Natural Gas Act contains an exemption evidently designed to protect the com-

has not been concluded, the proposed change goes into effect. In the case of rate increases, however, provision is made for the filing of bonds and detailed accounting for the proceeds, so that refunds may be ordered should the Commission subsequently find the increase to be not justified. As is usual in statutes of this character, the burden of proof is placed on the utility to justify the proposed increase.

In addition to the foregoing powers relating directly to rates, the Commission has been given the authority to prescribe accounts, require reports, and conduct investigations which is ordinarily delegated to regulatory agencies to enable them to function effectively. It is without authority over the issuance and sale of securities by natural gas companies, or by electric utilities unless organized and operating in a state which does not regulate the transaction, such matters being generally subject to the control of the Securities and Exchange Commission through its jurisdiction over registered holding companies and their subsidiaries. In certain respects, however, the statutory provisions go beyond the usual content of such measures. They specifically authorize the determination of the "actual legitimate cost" of utility property[15] and the fixing of "proper and adequate rates of depreciation."[16] They also empower the Commission to determine the cost of the production or transmission of electricity or natural gas even in cases where it has no authority to establish a rate.[17] The Commission is authorized to cooperate with the state regulatory commissions in various types of joint proceedings and to make available to them not only information and reports but also, on a reimbursable basis, members of its expert staff.[18]

The Commission has completed a number of general rate cases which have resulted in reductions amounting to an imposing dollar total. In eleven electric rate cases, listed in Table I, reductions of nearly 1 million dollars annually, or about $3,780,000 on a cumulative basis, have been ordered. A number of voluntary rate reductions have also been effected, which bring the savings to almost 2 million dollars on an annual basis and about $5,700,000 cumulatively.

Gas rates have been reduced in thirteen formal cases by more than 31 million dollars annually, as shown in Table II, and some 4 millions of annual reductions have been filed voluntarily. The cumulative savings involved in reductions of natural gas rates are in the neighborhood of 100 million dollars.

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petitive market position of natural gas. Sec. 4(e) denies the Commission authority to suspend rates for "the sale of natural gas for resale for industrial use only."

[15] Federal Power Act, Sec. 208; Natural Gas Act, Sec. 6.

[16] Federal Power Act, Sec. 302; Natural Gas Act, Sec. 9.

[17] Federal Power Act, Sec. 206(b); Natural Gas Act, Sec. 5(b).

[18] Federal Power Act, Sec. 209; Natural Gas Act, Sec. 17.

TABLE I

FEDERAL POWER COMMISSION
CASES RESULTING IN ELECTRIC RATE REDUCTIONS

Docket No.	Name of Company	Amount of Annual Reduction (000 omitted)
IT-5500	Chicago District Electric Generating Co.	$522
IT-5544	Otter Tail Power Co.	19
IT-5485	Albany Lighting Co.	1
IT-5545	Minnesota Power and Light Co.	47
IT-5517	Moline Rock Island Mfg. Co.[a]	325
IT-5512	Nevada California Electric Corp.	45
IT-5509	Gulf States Utilities Co.	6
IT-5547	Sioux City Gas & Electric Co.	6
IT-5514, 5515	Southwestern Light & Power Co.	5
IT-5723	Kansas City Power & Light Co.	2
IT-5738	Rockland Light & Power Co.	7
Total		$985

[a] Seller merged with buyers, cancelling sale for resale. However, a wholesale rate reduction of about $325,000 was agreed to, which was passed on in November, 1940.

TABLE II

FEDERAL POWER COMMISSION
CASES RESULTING IN GAS RATE REDUCTIONS

Docket No.	Name of Company	Amount of Annual Reduction (000 omitted)
Reductions Ordered after Formal Hearings		
G-109, 112	Natural Gas Pipe Line Co. of America[a]	$3,770
G-100, 101, 113, 127	Hope Natural Gas Co.[a]	3,610
G-118, 121, 124	Canadian River Gas Co., *et al.*[a]	2,086
G-200, 207	Panhandle Eastern Pipe Line Co.[a]	5,094
G-139, 142	Interstate Natural Gas Co., Inc.[b]	1,091
G-141	Cities Service Gas Co.[b]	4,446
G-462	Mississippi River Fuel Corp.[c]	945
		$21,042
Reductions Effected Informally after Field Investigations		
G-109, 112	Natural Gas Pipe Line Co. of America (second phase)	$2,738
G-208, 209	Lone Star Gas Co.	2,071
G-242, 257	El Paso Natural Gas Co.	526
G-133, 148, 157, 193	United Gas Pipe Line Co.	2,195
		$7,530
Reductions Effected Informally without Field Investigations		
—	Northern Natural Gas Co.	$2,287
—	Memphis Natural Gas Co.	353
		$ 2,640
Total		$31,212

[a] Decided by United States Supreme Court.
[b] Orders still being litigated.
[c] Petition for rehearing denied January 4, 1946.

In addition, some twenty proposals to increase electric and gas rates have, after suspension and investigation, been found unjustified. While the amounts involved in most of these cases have been small, the proposed increases which have been denied aggregate over half a million dollars annually. These cases are listed in Table III.

TABLE III

FEDERAL POWER COMMISSION
RATE INCREASE PROPOSALS DISALLOWED
OR WITHDRAWN AFTER SUSPENSION

Docket No.	Name of Company	Amount of Annual Increase Denied (000 omitted)
	Electric	
IT-5525	Northern States Power Co. of Minn.	$ 2
IT-5909	Florida Power Corp.	9
		$ 11
	Gas	
G-110	Arkansas Louisiana Gas Co.	$ 12
G-139	Mississippi River Fuel Corp.	10
G-142	Columbian Carbon Co.	5
G-144, 147	United Gas Pipe Line Co. *et al.*	16
G-150	Mississippi River Fuel Corp.	45
G-162	New York State Natural Gas Corp.	12
G-183, 190, 192	Home Gas Co.	216
G-187	Empire Gas & Fuel Co.	22
G-188	Public Service Co. of Indiana	1
G-202	Memphis Natural Gas Co.	4
G-203	Memphis Natural Gas Co.	1
G-223	New York State Natural Gas Corp.	6
G-224	New York State Natural Gas Corp.	47
G-225	Keuka Construction Corp.	22
G-412	United Fuel Gas Co.	50
G-523, 529	Godfrey L. Cabot, Inc., and Cabot Gas Corp.	31
		$500
Total		$511

While there is a striking difference between the tremendous reduction of natural gas rates and the much smaller amounts involved in electric rate cases, this is largely a reflection of the differences in the history, nature, and organization of the two industries—and therefore of the opportunities thus far afforded for effective action by the Commission.

Relatively few states have major natural gas reserves and in only nine does production exceed local consumption; but natural gas is consumed in thirty-three states. Thus, long-distance pipe lines are needed to transport gas from its sources to the major market areas. Gas from the great fields in the Panhandles of Texas and Oklahoma and from the adjacent producing areas in Kansas is transported 800 miles to Minneapolis, 900 miles to Chicago, and 1,200 miles to Detroit. Texas gas is carried through a 1,200-mile line to West Virginia, and is further

transported by other companies, so that some of it eventually moves into western New York and perhaps even into Canada. The natural gas industry, therefore, is predominantly interstate in character, with some 50 per cent of all the gas consumed (excluding field use, carbon black production, and that used in petroleum refineries) crossing state lines. Furthermore, the pipe-line companies do not ordinarily engage in distribution, but sell gas at wholesale, under so-called "city gate rates," to local utilities for distribution to the ultimate consumer. Thus the requisites of federal rate regulation—transportation of gas in interstate commerce or the resale of such gas—are commonly present; and, since such rates had not previously been subject to regulation, the Commission was able to cut rates by from a third to a half.

In the electric field, however, the situation is different. Interconnections have been extended, particularly during the war period, to provide for maximum economy through co-ordination and to serve as insurance to cover narrower margins of operation. Thus, in a recent proceeding before the Commission it was explained how a large Nebraska utility, which is tied in with the public power districts in Nebraska, is interconnected with Kansas, and through this interconnection tied in with utilities in Oklahoma and Texas, including the Southwestern Power Administration, which in turn were connected with utilities in Arkansas, the Commonwealth & Southern group of companies in five southwestern states, the Tennessee Valley Authority, and certain utilities in Ohio. At times all the properties in this gigantic network were controlled as to frequency by a generating unit in Ohio. But in spite of such interconnections, electric energy is generated in every state and, to a great extent, is distributed locally. Although the interstate movement of electricity is roughly equal to that used in the four industrial states of Ohio, Indiana, Illinois, and Michigan, it is still only 20 per cent of the total consumption. Furthermore, since the prevalent practice in the electric industry is for the transmitter also to distribute energy rather than to sell it to a local distributing company as in the natural gas industry, the element of sale for resale is often lacking. Therefore the Commission's rate-making jurisdiction extends to a much smaller portion of the electric business.

These factors help to explain why it is that so large a part of the Commission's contributions to the development of the law and technique of public utility rate making has been made in cases involving natural gas rather than electric energy, and also why the specific problems which I shall discuss are drawn largely from that field.

Approach and Methods of Rate Making

Citation of the impressive dollar totals of the rate reductions referred

to above does not mean that the Commission is unmindful of its responsibilities to the owners of the properties, as well as to the purchasers of service, or of its role as impartial arbiter between them. It is, of course, anxious to bring about lower rates where the facts warrant such action. That is its duty under the statute. But it has been interested particularly in promoting consistency in rate regulation and in insuring that the quantities to which the rate-making equation is applied rest on a sound basis of economic fact rather than upon conjecture and hypothesis. In the procedures which it has followed in its own cases, in the assistance which it has given upon request to state commissions,[19] and in its presentation of certain basic issues to the courts—including the highest court of the land—the Commission has been concerned with the establishment of sound approaches and methods of rate control having general application throughout the public utility field. The dollar reductions effected directly by action of the Commission, in other words, by no means measure the full scope or weight of its influence upon recent developments in public utility rate regulation. No doubt the outstanding contribution of this kind which has been made by the Commission is in the transition from the "fair value" to an investment rate base, with corollary improvements in the determination of depreciation and the fair rate of return.

The infirmities of the fair value doctrine in practice, whatever might be its theoretical merits from the standpoint of competitive economic analysis if applied to a substitute plant, are too familiar to require restatement here. It was condemned as unworkable in the Presidential Address before this Association in 1914.[20] It has been described as serving "merely to divert the time, attention, and funds of regulating bodies out of their proper channels into one of the most unreal fields of speculation in which the minds of metaphysicians have disported themselves since the days of the medieval schoolmen."[21] The present Chief Justice has stated that "when we arrive at a theoretical value based upon such uncertain and fugitive data we gain at best only an illusory certainty."[22] Nevertheless the necessity of giving consideration to inventories and appraisals of the physical properties of public utilities continued to harass and hamper the rate-making efforts of regulatory commissions from *Smyth* v. *Ames*[23] in 1898 until almost the present time. And it may

[19] For example, the Commission's experts were loaned to the Utah Commission in a proceeding which resulted in a $1,500,000 annual reduction of the rates of the Utah Power and Light Co., 50 P.U.R. (N.S.) 133 (1943). This reduction, which was related to an investment rate base, was upheld by the Utah Supreme Court, *Utah Power and Light Co.*, v. *Public Service Commission of Utah*, 152 P-2d 542 (1944).

[20] John H. Gray, "The Vagaries of Valuation," *American Economic Review*, Mar., 1914, Sup., pp. 18–44.

[21] Robert L. Hale, "The 'Physical Value' Fallacy in Rate Cases," 30 *Yale Law Journal* 710 (1921).

[22] Dissenting in *West* v. *Chesapeake & Potomac Telephone Co.*, 295 U.S. 662 (1935).

[23] 169 U.S. 466.

fairly be said that the present apparent freedom from the shackles of the valuation method is in no small measure due to the efforts of the Federal Power Commission.

We have noted that the Federal Water Power Act of 1920 gave a basis for using net investment rather than fair value as the rate base for licensees. With the enlargement of its rate-making authority to include interstate wholesale sales of electricity and natural gas, the Commission has adhered generally to the use of an investment rate base in proceedings before it, and in this it has generally been successful. But even before any of its own rate cases reached the Supreme Court the Commission, recognizing the importance of the issue and of its proper resolution, took occasion to file *amicus* briefs in support of state commissions which were seeking to establish that principle in cases which, while not conclusive, may have helped to pave the way for more recent and affirmative declarations of the Court.[24]

In one of its first major natural gas rate cases the Commission, in 1940, issued an interim order requiring the Natural Gas Pipe Line Company of America to reduce its rates by $3,750,000 annually.[25] For purposes of the interim order the Commission acted upon the testimony introduced by the Company, which was reproduction cost evidence. Accordingly the Commission found a fair value rate base, although it disallowed a claim of $8,500,000 for going concern value. In the Supreme Court, however, it was argued that for purposes of the further proceedings in the case the Commission should be permitted to use an investment rate base. And in a unanimous opinion sustaining the rate reduction order, the Court said: "The Constitution does not bind rate-making bodies to the service of any single formula or combination of formulas. Agencies to whom its legislative power has been delegated are free, within the ambit of their statutory authority, to make the pragmatic adjustments which may be called for by particular circumstances."[26] Following this decision an investment rate base was worked out in conference and an additional reduction of $2,750,000 was secured without the necessity of further formal proceedings.

In 1942 the Commission ordered a reduction of more than $3,600,000 annually in the rates of the Hope Natural Gas Company, after specifically rejecting as "hypothetical, conjectural, and inherently fallacious" the reproduction cost evidence presented by the Company and using as the rate base the "actual legitimate cost" of its property.[27]

[24] *Railroad Commission of California* v. *Pacific Gas & Electric Co.*, 302 U.S. 139 (1938); *Driscoll* v. *Edison Light & Power Co.*, 307 U. S. 104 (1939).
[25] *Ill. Comm. Comm.* v. *Natural Gas Pipe Line Co. of Am. et al.*, 2 F.P.C. 218.
[26] *Federal Power Commission, et al.* v. *Natural Gas Pipe Line Co., et al.*, 315 U.S. 575, 586 (1942). In a separate concurring opinion, in which Mr. Justice Douglas and Mr. Justice Murphy joined, Mr. Justice Black took the position that the Commission was free under the decision to use the investment principle in determining the rate base.
[27] *City of Cleveland* v. *Hope Natural Gas Co.*, 3 F.P.C. 150.

When this case was passed upon by the United States Supreme Court, the majority opinion said: "Rates which enable the company to operate successfully, to maintain its financial integrity, to attract capital, and to compensate its investors for the risks assumed certainly cannot be condemned as invalid, even though they might produce a meagre return on the so-called 'fair value' rate base."[28] If any lingering doubt remained that *Smyth* v. *Ames* had been effectively overruled, it vanished with the Supreme Court's approval of the Commission's order requiring an annual reduction of more than 5 million dollars in the rates of the Panhandle Eastern Pipe Line Company.[29] In this proceeding the Commission had refused even to receive in the record any evidence regarding the reproduction cost of the Company's properties.[30]

As a consequence of these decisions it may be said that the fair value rule has been ended, not only for the Federal Power Commission, but also for other regulatory agencies functioning in jurisdictions where the statutes and their construction are similar. The use of the investment rate base has been upheld repeatedly when applied so as to yield fair and reasonable results.

The question of what shall be taken as the measure of the investment in the property has raised certain problems. For example, shall reaccounting be permitted, particularly in connection with costs originally charged to expense but later sought to be included as capital outlays for rate case purposes? This question arose in the *Hope* case, where the Company claimed approximately $12,600,000 for well-drilling expenses incurred and currently charged to operating expense from 1898 to 1923, when the West Virginia Commission required the capitalization of such expenditures. Although the Commission's system of accounts now requires capitalization of the costs of drilling productive wells it refused, in accordance with the overwhelming weight of authority and regulatory practice, to permit the inclusion in the rate base of amounts previously charged to expense as an exercise of managerial discretion.[31]

Another question arises in connection with the treatment to be given in rate cases to differences between the "original cost" and the recorded "book cost" of property. Where such differences represent mere inflation or write-ups, properly includible in the plant adjustment account, no real problem exists. The Commission customarily requires the immedi-

[28] *Federal Power Commission* v. *Hope Natural Gas Co.*, 320 U.S. 591, 605 (1944).

[29] *Panhandle Eastern Pipe Line Co.* v. *Federal Power Commission*, 324 U.S. 635 (1945). After affirmance of the Commission's order by the Circuit Court of Appeals, the Company applied for a writ of certiorari. The request was granted in part, but the Supreme Court refused to review the Commission's action in holding that reproduction cost testimony was not admissible.

[30] *City of Detroit* v. *Panhandle Eastern Pipe Line Co.*, 3 F.P.C. 273 (1942).

[31] *Op. cit.*, 3 F.P.C. 150, 164–165 (1942); 320 U.S. 591, 599, 605 (1944).

ate writing-off of such items and gives no recognition to them in determining the investment rate base. Where, however, the differences represent legitimate arm's length cost to the owner, and therefore are properly included in the acquisition adjustment account, the problem is more difficult.

Such items are required to be "depreciated, amortized, or otherwise disposed of, as the Commission may approve or direct." Ordinarily they have been required to be amortized over a period of not more than fifteen years through charges to income. In sustaining the Commission's accounting orders, the courts to date, apparently guided in this respect by the decision in the *American Telephone* case,[32] have treated the question as one of accounting only.[33] Thus the classification, and perhaps the disposition, of an item in the acquisition adjustment account may not necessarily govern its treatment in connection with the determination of the investment rate base.

Thus far the Commission has not been required to deal with the matter of acquisition adjustments as a practical matter in a formal rate case. As a matter of fact, less than 5 per cent of the electric plant of utilities examined by the Commission in its original cost work to date has been classified as acquisition adjustments. Of some 8 billion dollars of electric plant reported in detail by 228 utilities for 1943, only 3 per cent was so classified on the average. So the problem may not be a large one. When it arises, however, it will have to be dealt with in terms of the equities of the particular situation, which will require analysis of the nature of the acquisition and of the property acquired, study of the circumstances of the transaction and of the relationships between the parties, and examination of public and private benefits involved.

In determining the investment rate base, as under the fair value doctrine, the treatment of depreciation is of great importance. The problem is essentially that of insuring consistency of treatment. In rate cases it has been by no means unusual for utilities to estimate the annual depreciation to be charged against customers in a manner producing a relatively high amount and at the same time to contend that the

[32] *American Telephone & Telegraph Co.* v. *United States*, 299 U.S. 232 (1936). Following this decision, which evidently was based in considerable measure upon a stipulation conceding that accounting reclassifications were for accounting purposes only and that items would be dealt with on their merits in rate proceedings, the Commission adopted its Order No. 42-A, July 11, 1939, which provides in paragraph (F) that: "Disposition of amounts in Electric Plant Acquisition Accounts, as above directed, is for accounting purposes only and such disposition shall not be construed as determining or controlling the consideration to be accorded these items in rate or other proceedings, nor shall anything contained herein prevent the Commission from subsequently ordering the amounts to be charged directly to surplus or from modifying the adopted amortization period."

[33] E.g., *Northwestern Electric Co.* v. *Federal Power Commission*, 321 U.S. 119 (1944); *Pacific Power & Light Co.* v. *Federal Power Commission*, 141 F. 2d 602 (1944); *California Oregon Power Co.* v. *Federal Power Commission*, 150 F. 2d 25 (1945), certiorari denied, January 4, 1946.

deduction for depreciation in determining the rate base should be on a different, and lower, basis. The inequity of this application of a dual standard is patent.[34]

The Federal Power Commission has recognized depreciation as an economic phenomenon, giving rise to a true cost of utility service, which must be recovered in the rates. It has consistently taken the position that the accrual of annual depreciation charges designed to represent the consumption of the plant in rendering the service must be based on the cost rather than upon the value of the property concerned. When the *Natural Gas Pipe Line* case was first before it, the Commission permitted a sinking-fund method of amortization using a 6½ per cent interest rate, which was equal to the rate of return allowed as fair, but based upon the investment in the property, rather than on its claimed fair value.[35] In this it was sustained by the Supreme Court, which on this point said: "The Constitution does not require that the owner who embarks in a wasting-asset business of limited life shall receive at the end more than he has put into it."[36] The Court also approved the use of the same percentage rates for the sinking-fund accrual and the fair rate of return.[37]

In the *Hope* case the Commission used investment as the basis of the allowed annual charges for depreciation and depletion,[38] and again it was fully sustained by the opinion of the United States Supreme Court, in these terms: "this Court recognized in *Lindheimer* v. *Illinois Bell Tel. Co., supra,* the propriety of basing annual depreciation on cost. By such a procedure the utility is made whole and the integrity of its investment maintained. No more is required. We cannot approve the contrary holding of *United Railways Co.* v. *West,* 280 U.S. 234, 253–254."[39] This clear-cut acceptance by the Court of investment as the depreciation base, and its specific reversal of the earlier *West* case on this point, has clarified what might otherwise have become a troublesome question. Furthermore, in the *Hope* case and all subsequent natural gas proceedings the Commission has consistently and successfully employed the straight-line method.

[34] See *Reports of the Committee on Depreciation, National Association of Railroad and Utilities Commissioners,* 1944 and 1945. In the *Hope* case, for example, the Commission pointed out that: "The company presented inconsistent claims in this respect. It alleged a relatively small amount of accrued or existing depletion and depreciation to be deducted in fixing the rate base, but claimed large annual amounts for future operating expenses." *Op. cit.,* 3 F.P.C. 150, 167 (1942). It further stated: "In our opinion, where reasonably proper depletion and depreciation accounting practices have been observed by a natural gas company, the resulting reserve is the best measure of the depletion and depreciation existing in the property, i.e., the accumulated cost of property which has been consumed in service." *Ibid.,* at p. 168.

[35] *Op. cit.,* 2 F.P.C. 218, 229–230 (1940).

[36] *Op. cit.,* 315 U.S. 575, 593 (1942).

[37] *Ibid.,* at p. 596

[38] *Op. cit.,* 3 F.P.C. 150, 176–177 (1942).

[39] *Op. cit.,* 320 U.S. 591, 606–607 (1945).

Since annual depreciation is charged against the customers for the current consumption of plant, it would manifestly be inequitable to require them to pay also a return on such part of the plant as they have, in effect, already paid for. When such repayments are reinvested in the property, the additional investment is reflected, of course, in the rate base. Likewise, if depreciation funds must be held by the company prior to reinvestment in facilities, proper consideration must be given to that condition. But in either event equity requires recognition of the fact that through depreciation charges the customers have paid for the consumption of the plant in the production of service. Therefore, in applying the investment rate base the Commission uses net investment, determined by deducting the accrued depreciation from the gross investment.

Depreciation reserves which have been properly accrued on the books of the company in the past have been used by the Commission for this purpose rather than estimates of accrued depreciation made by "observation" of so-called "percent condition" of the property. Referring to the estimates of depreciation and depletion in the *Hope* case, the Commission spoke of the Company's theory as being "opposed by reason and facts," and characterized its methods as being "based primarily upon a sporadic visual inspection of physical deterioration," whereas "most of [the] production and transmission property is not visible and the extent to which the service life has been consumed cannot be determined from observation alone. Also, the functional causes of the retirement of physical property are given little consideration by the company's visual method which samples physical causes."[40] In the *Hope* case, however, the Company having substantially overaccrued depreciation while unregulated, the Commission deducted not the full book reserve but the equivalent of the reserve requirement calculated on the same service-life basis as that used in deriving the annual depreciation charges.

The problem of depreciation, although simplified by the Commission's insistence upon consistency of treatment, is by no means an easy one. For example, service-life determination in the case of natural gas involves an estimate of reserves—the volume of gas stored in the producing horizon thousands of feet below the surface of the earth. A geologist's analysis of the area of the subterranean producing zone and periodic observations of pressure decline as gas is extracted may be involved. Since the purpose of the charge for depreciation is protection of the integrity of the investment, management has of course the primary responsibility for determining the annual accrual. If the rates chosen by

[40] *Op. cit.*, 3 F.P.C. 150, 168 (1940), citing *Re Rochester Gas & Electric Corp.*, 33 P.U.R. (N.S.) 393, 468-490.

management bear a reasonably close relationship to the apparent requirements of the service-life principle, the regulatory agency may be satisfied by insuring consistency between the annual charge and the reserve as the measure of accrued depreciation. This position has been taken by the Federal Power Commission in several leading electric and natural gas rate cases,[41] and has not been challenged successfully in the courts.

With the rate base established, the next—and equally important—problem in rate making is the selection of the fair rate of return. Here again the Commission has contributed to the improvement of regulatory technique. In selecting rates of return the Commission has followed the usual pattern of reasoning regarding this matter, declaring that the fair rate of return "shall be equal to that generally being made at the same time and in the same region on investments in other enterprises attended by corresponding risks, and . . . the return should be sufficient to insure confidence in the financial soundness of the utility and to maintain its credit and enable it to attract the capital necessary for the proper discharge of its public duties."[42] Its findings have uniformly been approved by the courts.[43]

Evidence on the rate of return has in the past usually been offered in the form of "expert opinion," with little or no documentary, statistical, or economic support. Efforts were sometimes made to balance what was lacking in quality by the addition of quantity. For example, in the first natural gas rate case before the Commission eight witnesses testified directly and others indirectly on the rate of return; almost half the ten-thousand page record and many days of hearing were devoted to the subject.[44] The Commission, considering the question worthy of concentrated and systematic study, has instructed its staff to conduct exhaustive and continuing research on the matter and to prepare comprehensive data for use in rate cases. These data are exact and specific, in contrast to the generalized opinions so frequently offered. They are kept up to date and are amplified to include materials pertinent to each individual case. In two recent large rate cases no testimony was offered by the companies on the subject, the only evidence of record being that introduced by the staff of the Commission.[45]

On the whole the rates of return allowed by the Commission have been liberal, ranging from 5½ per cent in one electric case, where the

[41] E.g., *Chicago District Electric Generating Corp.*, 2 F.P.C. 412, 424 (1941); *City of Detroit* v. *Panhandle Eastern Pipe Line Co.*, 3 F.P.C. 273, 281 (1942).

[42] *City of Cleveland* v. *Hope Natural Gas Co.*, 3 F.P.C. 150, 195 (1942).

[43] E.g., *Federal Power Commission* v. *Hope Natural Gas Co.*, 320 U.S. 591 (1944); *Colorado Interstate Gas Co.* v. *Federal Power Commission*, 324 U.S. 581 (1945); *Panhandle Eastern Pipe Line Co.* v. *Federal Power Commission*, 324 U.S. 635 (1945).

[44] *Natural Gas Pipe Line Co. of America*, 2 F.P.C. 218 (1940).

[45] *Cities Service Gas Co.*, 3 F.P.C. 459 (1943), appeal pending in U.S. Circuit Court of Appeals (10th Circuit); *Mississippi River Fuel Corp.*, Opinion No. 126 (1945), petition for rehearing denied January 4, 1946.

risk was minimized by a guarantee of costs under long-term contracts,[46] to the 6½ per cent which has generally been allowed natural gas companies, with 6 per cent fixed in the most recent gas case.[47] It is recognized, however, the fair rate of return is not a fixed quantity, independent of economic conditions or of changes in the money market. Yields on utility securities have declined steadily in recent years and the month to month trend is still downward. At the end of November, 1945, electric utility securities—on a composite basis including common stock, preferred stock, and bonds—were accepted by the investor at an average over-all yield of 3.6 per cent. If such low yields persist it is to be expected that rates of return allowable in future rate cases will necessarily be lower than those allowed in the past.

Despite the large reductions of rates, the evidence thus far shows no impairment of investor interests or discouragement of new capital outlays in the natural gas industry. Around 200 millions of dollars have been invested in new or enlarged facilities since the Natural Gas Act became effective and during the period when the Commission was making the reductions and establishing the procedures described, while applications for authority to construct projects involving many more millions are now pending.[48] During the same period natural gas companies have sold new securities at very favorable rates.[49] Furthermore, equaling or bettering general market trends, the common stocks of natural gas companies have increased substantially since the Commission's rate reduction orders have been entered.[50] At the same time, how-

[46] *Chicago District Electric Generating Corp.*, 2 F.P.C. 412, 427 (1941).

[47] *Mississippi River Fuel Corp.*, Opinion No. 126, referred to in note 45, *supra*.

[48] "The First Five Years Under the Natural Gas Act," *A Report to the Chairman of the House Committee on Interstate and Foreign Commerce* (Washington: Government Printing Office, Jan., 1944), p. 12.

[49] E.g., Panhandle Eastern Pipe Line Company in January, 1941, issued $6,250,000 First Mtge. & First Lien Bonds, 1.65% to 2.30%, due serially 1946–50, sold at par to yield 1.65% to 2.30%; and in June, 1943, issued $10,000,000 Debentures, 2¾%, 1953, sold at 101 to yield 2.64%. These two issues were called for redemption in December, 1945, and the funds for payment were obtained by the issue of $16,000,000 unsecured 10-year serial bank notes, interest 1½%, 1¾% and 2%. Also, in May, 1945, Panhandle Eastern Pipe Line Company issued $10,000,000 First Mtge. & First Lien Bonds, 2¾%, 1965, sold privately to five insurance companies.

Northern Natural Gas Company in November, 1945, issued $9,000,000 Debentures, due serially 1950–55, sold to yield 1.40% to 1.90%; and $16,000,000 Debentures due serially 1956–65, sold to yield 2.05% to 2.55%.

Natural Gas Pipe Line Company of America filed with the Commission in December, 1945, an application for public convenience and necessity, in which the company stated that it is revising its present capital structure and proposes to issue $25,000,000 First Mortgage and Collateral Trust Bonds, due 1963, at 2.60%.

[50] Below are some striking examples:

	Common Stock Price	
Company	At date of rate reduction order	As of Jan. 9, 1946
Panhandle Eastern Pipe Line Co.	29-⅜	77-½*
El Paso Natural Gas Co.	22-¾	48-⅛
Northern Natural Gas Co.	28-¼	46-⅝
Interstate Natural Gas Co.	22	41

* Adjusted to reflect 2 for 1 split—actual quotation 38-¾.

ever, further thought may well be given to the whole question whether the conventional plan of rate making on the fair return basis provides properly for that incentive to enterprise and efficiency on the part of private management which must be provided if regulation is not to defeat its own purposes and is truly to serve the public interest.

Some Specific Problems of Rate Regulation

As the Commission has gained background and experience in rate regulation and as its basic approaches and methods have developed and found acceptance, a number of problems arising in the application of these broad principles to specific situations are becoming apparent. With the transition from war to peacetime responsibilities and the hoped-for return to more settled economic conditions, they will doubtless become sharper and more clear-cut. Many of them are present in matters now pending before the Commission; others are likely to emerge in the course of the nation-wide investigation which the Commission is conducting to inform itself, Congress, and the public more fully concerning conditions in the natural gas industry and to aid in the fulfillment of its regulatory responsibilities.[51] Therefore they can only be sketched here as questions to which serious attention must be given.

Thus far major emphasis in the Commission's exercise of its rate-making authority has been placed upon the prompt and substantial reduction of natural gas rates from their previous high levels. Therefore the Commission has frequently proceeded through the issuance of interim orders. A majority of these rate orders have required reductions of a certain dollar amount based on operations during the test year; some have been entered without waiting for the development of a full and complete record on the basis of which specific rates could be prescribed for the future. This postponement of decision as to the distribution of reductions among classes of customers until rates are filed in compliance with the Commission's orders has afforded considerable latitude for the exercise of managerial initiative and discretion; generally it has not occasioned unwarranted delays. If, however, the matter of rate relationships assumes greater importance as rates are reduced to more reasonable levels—which seems not unlikely—it will probably be necessary for the Commission to go further in the direction of prescribing specific rates and to explore more fully the exercise of its powers to prevent discrimination. This, in turn, may entail difficult problems of cost allocation and of policy.

Because of the previously-noted fact that the Commission's rate jurisdiction is limited to sales for resale, the Commission has been concerned with allocations between such business and the other operations of

[51] Docket G-580, *Natural Gas Investigation*, instituted by Order of September 22, 1944.

natural gas companies, such as their direct sales to industrial customers, which amount to roughly 50 per cent of the gas moving in interstate commerce.[52] In the utility field in the past a not uncommon practice has been to make segregations of the property reflecting its use—for example, as between interstate and intrastate commerce, or that required by the needs of individual customers—and on this basis to apportion the investment and operating costs. The Commission, evidently taking the view that the major long distance gas pipe lines have been constructed to serve terminal markets in large urban centers and that service to intermediate customers might not otherwise have been available, has generally used allocations of "system cost," rather than attempting property and investment segregations.

The cost allocation method usually employed by the Commission involves a division between constant and variable costs, with the former, generally speaking, assigned on a basis of so-called "peak responsibility" or demand and the latter apportioned to the volume of consumption. It was used by the Commission in ordering a reduction of the Denver city-gate rates of the Colorado Interstate Gas Company.[53] This order was subsequently sustained by the United States Supreme Court[54] although in the companion *Colorado-Wyoming* case the order of the Commission was in part reversed and remanded for a clarification of the findings regarding allocated costs.[55]

To date the cost allocation decisions have involved chiefly the determination of rates for the regulated, as compared with the non-jurisdictional, business as a whole rather than the relationships among regulated rates to individuals or customer groups. If the question of such relationships and their discriminatory or nondiscriminatory character assumes greater prominence, it is probable that further examination and refinement of allocation techniques may become necessary. In such further consideration inquiry may be made as to whether the system cost method properly reflects, in the case of a far-flung natural gas pipe-line system, the extent to which the cost of service may vary with transmission distance. Furthermore natural gas companies commonly sell, both directly and for resale, so-called "interruptible" gas, which is largely put to industrial uses. In justification of this practice it is claimed that such sales, which ordinarily are priced competitively below the

[52] Although the Commission did not deem this necessary in *City of Detroit* v. *Panhandle Eastern Pipe Line Co.*, 3 F.P.C. 273, 289 (1942), and was sustained in this view by the United States Supreme Court under "the exceptional circumstances of this case," *Panhandle Eastern Pipe Line Co.* v. *Federal Power Commission*, 324 U.S. 635, 647 (1945).

[53] *Canadian River Gas Co. et al.*, 3 F.P.C. 32, 61 (1942).

[54] *Colorado Interstate Gas Co.* v. *Federal Power Commission* and *Canadian River Gas Co.* v. *Federal Power Commission*, 324 U.S. 581 (1945).

[55] *Colorado-Wyoming Gas Co.* v. *Federal Power Commission*, 324 U.S. 626 (1945). Subsequently this case was settled by agreement between the Commission and the Company.

rates for "firm" gas, by improving load-factor tend to bring down over-all average costs, and therefore are of general public advantage so long as incremental costs are covered. Determination of the extent to which this contention is sound in any particular rate situation would require further delving into the adequacy of the cost allocations, as well as examination of the rate spread and the degree to which such sales are in fact subject to interruption at times of peak demand.[56]

Another major problem of rate application arises from the fact that the provisions of the Natural Gas Act are specifically made inapplicable to "the production or gathering of natural gas."[57] When gas is independently produced and sold at arm's length to a natural gas company subject to the jurisdiction of the Commission, the price thus paid is charged to operating expense and allowed as a cost in proceedings involving the rates of the purchaser. But where a natural gas company produces and gathers its own gas the question arises, how shall this be treated for rate purposes? More specifically, does the prohibition of regulation run simply to the activity of producing and gathering gas, leaving the Commission free to consider the facilities involved in calculating the rate base and expense for rate-making purposes; or must the Commission find some means of establishing a value—a going "field price"—for such gas, which would then be treated as a cost to be recovered in the rates?

The Commission has chosen the first alternative, in effect applying the public utility, fair return doctrine to the production and gathering operation. Thus, in the *Canadian River* case the investment in such facilities was included in the rate base and the over-all return was limited to $6\frac{1}{2}$ per cent.[58] In this method the Commission was sustained by a closely divided Supreme Court. The majority, referring to its adherence to the "end result" doctrine of the *Hope* case, held that the Act "does not preclude the Commission from reflecting the production and gather-

[56] The rate jurisdiction of the Commission does not extend to direct industrial sales from interstate pipe lines, which therefore have generally been unregulated, although the Indiana Commission has recently asserted jurisdiction over such sales within that state, at least to the extent of requiring the filing of tariffs and reports, Cause No. 16741, *In the Matter of Investigation of Panhandle Eastern Pipe Line Company*, Nov. 21, 1945. An injunction against the enforcement of this order has been sought by the Company in a complaint filed January 2, 1946, Cause No. 5440, *Panhandle Eastern Pipe Line Co.* v. *Public Service Commission of Indiana*.

It has been held, however, that all interstate gas sold for resale, "including that sold for industrial use, is subject to rate regulation by the Commission," notwithstanding the specific exemption of such rates from its suspension power, *Colorado Interstate Gas Co.* v. *Federal Power Commission*, 324 U.S. 581, 596 (1945). Thus the Commission may inquire into the reasonableness of such rates, as well as into any question of discrimination which may be involved in their application, although corrective action, if called for, would presumably be limited by its inability to require involuntary rate increases. Troublesome questions might also arise from the fact that service conditions in such situations are more directly within the control of the local distribution utility than of the interstate pipe line company.

[57] Sec. 1(b).

[58] *Op. cit.*, 3 F.P.C. 32 (1942).

ing facilities of a natural gas company in the rate base and determining the expenses incident thereto for the purposes of determining the reasonableness of rates subject to its jurisdiction."[59] The Chief Justice, in a dissenting opinion concurred in by Justices Roberts, Reed, and Frankfurter, took the position that the Commission had "exceeded its jurisdiction and reached a result which must be rejected because unauthorized by the applicable statute."[60] Mr. Justice Jackson concurred because "the orders in question have no immediate 'impact' upon production and gathering of gas" and because of the rule laid down by the majority in the *Hope* case. He nevertheless still thought it "a fantastic method of fixing a 'just and reasonable' price for gas,"[61] thus taking a position consistent with his thought-provoking separate opinion in the *Hope* case, in which he argued that the conventional methods of public utility rate making had little or no application to the natural gas industry.[62] Under these conditions it is evident that the Commission will have reason to give further consideration to this problem.

For the method used by the Commission it should be said that it is direct and simple and that it avoids the elements of conjecture which would necessarily be involved in an estimate of fair field price—particularly in areas where independent production is relatively small or where, as is frequently the case, competitive pipe-line outlets are few or nonexistent. And, while it tends to eliminate or reduce the speculative profits of natural gas companies from gas production, the Commission's allowance, as operating expense, of the acquisition cost of leaseholds, the delay rentals thereon while they are being held in reserve, well-drilling and exploratory costs and all royalties and other expenditures incident to the operation of leaseholds—items which might not be reflected in the going field price—tends likewise to minimize the risk element in such operations.

The companies, notwithstanding such lessening of risk, are opposed to this method, contending that it is contrary to the intent of Congress and that it deprives them of a proper opportunity for profit which is a necessary incentive to the exploration for and development of gas reserves. It is argued that the restriction of earnings on their own gas production operates to depress the prices paid to independent producers, and thus encourages the waste, rather than the conservation of gas. Although historically gas discoveries have commonly been a by-product

[59] *Op. cit.*, 324 U.S. 581, 603 (1945).

[60] *Ibid.*, at p. 615. The opinion also took the position (at p. 617) that the question was not properly before the Court in the *Hope* case but "is now for the first time presented . . . for decision." See also the dissent of the same Justices in *Colorado-Wyoming Gas Co.* v. *Federal Power Commission*, 324 U.S. 626, 635 (1945). See also their concurrence in *Panhandle Eastern Pipe Line Co.* v. *Federal Power Commission*, 324 U.S. 635, 650 (1945).

[61] *Op. cit.*, 324 U.S. 581, 608, at p. 611.

[62] *Federal Power Commission* v. *Hope Natural Gas Co.*, 320 U.S. 591, 628 (1944).

of the search for oil, price unquestionably has been a large factor in the development of known fields and in the utilization of gas supplies. Furthermore, some question may be raised as to the long-run effects of recognizing all exploration costs as operating expenses.

The issue continues to be a live one in current gas rate cases.[63] Apparently the Commission is free to follow either the investment rate base or the field price method. Its selection between these alternatives must be guided by its judgment concerning the direction in which the public interest ultimately lies. The choice is not an easy one.

One further problem should be referred to briefly: that of insuring to the ultimate consumer the benefits of such rate reductions as the Commission may secure. Since local distribution is specifically excluded from the rate-making authority of the Federal Power Commission, the Commission cannot itself require that reductions of wholesale rates be passed along. It is—and to the greatest possible extent should remain—the function of the state or local regulatory agencies to investigate the revenue needs and to prescribe the rates of the retailing utilities. So far as the prescription of rates for the future is concerned, the problem is mainly one of effecting a proper co-ordination of federal and state regulatory action. In cases, however, where the Commission's rate reduction orders are contested in the courts, and are stayed pending final adjudication, it may become a complicated matter.

In such cases the rates previously charged remain in effect, with the difference between such rates and those ordered by the Commission impounded in a fund which is subsequently disposed of in accordance with the outcome of the litigation. The appeal may consume several years and the impounded fund may grow to huge proportions, as in the *Panhandle* case where it amounted to about 25 million dollars. If and when the Commission's rate order is sustained, there may be some question as to the disposition of the fund. Clearly it should not constitute an undeserved "windfall" to the local retailing utility, and these companies frequently have agreed to pass along the savings to their customers. In a recent case, however, the United States Supreme Court held that since "the rates collected from customers during the refund period were the lawful rates, so fixed"[64] and the sums impounded had been paid by the retailing utility out of its own funds, the ultimate distribution of the fund was outside the jurisdiction of the federal court, which had granted the stay and administered the impounded monies, but must be determined by the state laws relating to rate regulation and reparation.

[63] E.g., *Mississippi River Fuel Corp.*, Opinion 126 (1945), petition for rehearing denied January 4, 1946; Dockets G-440 and G-591, *United Fuel Gas Co.*, *et al.*

[64] *Central States Electric Co.* v. *City of Muscatine*, 324 U.S. 138 (1945), Justices Black, Murphy, Rutledge and Douglas dissenting.

The peculiar factual and legal aspects of that particular case are too complicated to permit full discussion of its implications here.[65] It is plain, however, that resort to a multitude of claims by individual customers for a sort of "secondary reparation" would constitute a most unfeasible and unsatisfactory method of protecting their interests. Should any such situation develop at all generally, the most effective regulatory efforts might be largely frustrated unless the agencies concerned were able to co-operatively devise an adequate remedy.

Conclusion

In this paper it has not been my purpose to extol in self-serving terms the rate-making achievements of the Federal Power Commission or to argue that completely satisfactory answers to all the complex and changing questions in this field have been found. Much has been accomplished; much remains to be done. Continuing solid effort and thorough economic analysis of the problems which lie ahead will be required if the Commission is to protect adequately and justly the public interest in the delicate process of rate making, which as Mr. Justice Douglas has recently remarked, "involves a balancing of the investor and the consumer interests."[66] It is my hope, however, that in the decade to come the Commission will be able to contribute as largely to the improvement of public utility rate making as it has throughout the short period during which it has exercised authority in this field of regulation.

[65] The claim for refund was made by the city of Muscatine, Iowa, on behalf of some 2,400 residents who were customers of the Central States Company. In Iowa the state commission is without jurisdiction over electric rates, which are fixed by municipal ordinances, but only prospectively. The city had directed a rate reduction after the stay of the Federal Power Commission's order was vacated. The Company had not attacked the rates or made any claim to the impounded funds until after the Circuit Court of Appeals had adjudged that they belonged to the customers. Mr. Justice Black thought that under the circumstances there was little "likelihood of these consumers obtaining relief . . . for the injury they have suffered as a result of the action . . . in granting a stay of the Federal Power Commission's order." (*Dissenting Opinion*, 324 U.S. 140, 146 at p. 151.) Mr. Justice Douglas thought that "the court below selected the most equitable and just method of rectifying the injury done by its stay order." (*Dissenting Opinion*, 324 U.S. 140, 152, at p. 153.)

[66] *Hope Natural Gas Co.* v. *Federal Power Commission*, 320 U.S. 591, 603 (1944).

RATE-MAKING POLICIES OF FEDERAL POWER PROJECTS

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According to a recent estimate, 20 per cent of the electric power producing facilities of the United States is now owned and operated by the federal and local governments.[1] Heading the list of these public projects in point of national importance as well as in point of size are the Tennessee Valley Authority's power system and the Columbia River power system, the latter of which generates power at the Bonneville and Grand Coulee Dams for transmission and sale by the Bonneville Power Administration. Lumping together all power plants under the jurisdiction of the Department of the Interior, one learns that this department marketed during the past fiscal year 18 billion kilowatt hours of power, or nearly 9 per cent of the national output.[2] This, I fancy, makes Secretary Ickes the operator of the world's largest group of electrical utilities.

Needless to say, when public enterprise reaches the scale thus already attained in the field of electric power, its policies of marketing and of rate making become a subject of high economic import. The import is all the greater because the effect of these policies has been by no means confined to those somewhat limited areas where federal power has been made available for sale on a large scale. In promoting the widespread and intensive use of electricity under the stimulus of radically reduced rates of charge, these public projects have exercised a marked influence on utility rate making by private companies. A strong case can be made for the thesis, maintained by a number of experts who have watched the recent trend of utility rates throughout the country, that the example of extremely low rates charged by various publicly-operated plants, together with the marked increase in demand for electricity accompanying these lower rates, have been far more potent in causing private companies to reduce their own rates than have all of the regulatory efforts of the public service commissions.

The subject of this paper concerns the rate-making policies of the most dynamic of these publicly-operated systems; namely, the federal projects operated as parts of multiple-purpose river developments. But I shall not attempt a complete coverage of even this limited subject. Instead, I propose merely to mention certain rate-making policies that seem to me of outstanding interest.

Let it first be noted that the war has greatly retarded the develop-

[1] Peter Becker, Jr., in *Wall Street Journal*, Nov. 15, 1945.

[2] So stated in a report by Arthur Goldschmidt, Director of the Power Division, to Secretary Ickes, December 16, 1945, as quoted in *Public Utilities Fortnightly*, January 17, 1946, p. 100.

ment by the newer federal agencies of their peacetime policies of marketing and pricing electric power. The TVA had hardly made more than a good start in the widespread distribution of power throughout the Valley before it was compelled to direct its efforts to the supply of high load factor power for the production of aluminum and of other materials or implements of war. The Bonneville Power Administration did not even have a chance to make a good start, and its major generating capacity was rushed frantically to completion in order to meet the threat of a menacing war shortage of electric power.

The contribution of these and other federal power projects to the winning of the war—a contribution so vital that it has already repaid the nation many times over for the construction costs of the power facilities—would be well worth telling in detail—all the more worth telling since it is a contribution not overstressed by the highly active publicity bureaus of the private utility companies. But the conversion of the federal power projects so largely into war industries was not helpful to an experimental growth of rate-making policies designed to serve the economic welfare of regions. As a result, a current survey of these policies would report no striking changes in power policies from those prevailing five years ago. What it would disclose is the presence today of some difficult but intriguing problems of developing markets for a power generating capacity far in excess of that which would have been completed by 1946 had it not been for the urgency of the war. As the Bonneville Power Administration stated in its last annual report, these war requirements have telescoped ten years of normal growth into a brief five years.

Turning now to what seems to me the outstanding attributes of national power policy, I would mention, first, a change in major objective from that of securing maximum revenue to that of encouraging a widespread and intensive use of electricity by various promotional devices, including a marked reduction in market price. This change in emphasis is illustrated by the contrast between the TVA policies and the original arrangements for the marketing of power from Boulder Dam. Under the Boulder Dam program, which was developed during the administration of President Hoover, electric power (or rather the right to use the flowing water and the right to use the generating plants for the conversion of this water into power) was to be marketed at the bus bars to municipal and private distributors which would assume the responsibility for transmission and which would be free from any federal control of the rates at which they would resell the power to the ultimate consumers. On the other hand, both the TVA and the Bonneville Administration undertake transmission as well as generation; and both are under statutory mandate to give priorities to public

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distributors. Moreover, both agencies undertake to protect the ultimate consumers by contractual provisions requiring the retail distributor to abide by certain terms of resale set forth in the contract. In the execution of this policy TVA has had the opportunity to make much more progress down to date than has the Bonneville Administration.

The change in primary objective that I have just noted as one from that of maximum revenue to that of widespread and intensive use of electric power has been characterized by some writers as a change from the federal policy of selling power at a profit to the policy of selling this power at cost. This latter statement, however, would oversimplify the nature of the shift in policy. It would ignore the fact that the power from some of the reclamation projects—notably from Grand Coulee—is designed to be sold at a profit, which in turn is to be used to subsidize irrigation. In the second place, it would overlook the fact that the very meaning of the phrase "sale of power at cost" is indefinite, because many of the costs of river development that are assigned to power are shares of joint costs allocated on some basis that is necessarily arbitrary within wide limits. Under these circumstances, the relationship between the wholesale rates of the federal power projects and the costs of producing power from these projects, including both fixed charges and operating expenses, is by no means close.

This lack of close adherence of wholesale power pricing to the principle of sale at cost might be criticized by some as a major weakness in our prevailing national power policies. In my opinion, however, it is a virtue rather than a weakness—at least so far as concerns the rate-making policies of the projects in the Pacific Northwest and in other areas of the country that are still undeveloped industrially. In these areas there are impelling reasons for basing wholesale power prices largely on estimates of rates that will permit a rapid development of the power market. As long as such rates are more than adequate to cover those operating costs and fixed charges that are directly assigned to power, as distinct from those costs that can be allocated only by some joint cost formula, I doubt the wisdom of an attempt to equate rate levels with arbitrarily allocated production costs.

Closely related to the policy of encouraging widespread and intensive use of electric energy has been the further policy of directing that use into channels deemed to be of greatest public benefit. Overlooking the priorities of war industry, since we are here concerned with peacetime objectives, one notes two types of preferences established by Congress with respect to the Tennessee Valley Authority and the Bonneville Power Administration. The first preference, which appears to refer to market priorities rather than to the enjoyment of lower rates, is a preference given to states, counties, municipalities, and rural co-operatives.

The second preference, which concerns rates directly, is contained in declarations of policy to the effect that the federal power projects are designed particularly for the benefit of domestic and rural consumers, with the consequence that sale to industry must be considered a secondary purpose "to be utilized principally to secure a sufficiently high load factor and revenue returns which will permit domestic and rural use at the lowest possible rates and in such manner as to encourage increased domestic and rural use of electricity."[3] Incidentally, both of these types of preferential provision seem to have been taken over by Congress from the earlier Power Authority Act of the state of New York, which was passed in 1931 and which applies to the marketing of power from the proposed St. Lawrence River development.[4]

The preference which these federal and state statutes would accord to the small retail consumer of electricity as distinct from the large industrial user has sometimes been criticized by public utility spokesmen on the ground that the promotion of industries by low power rates is of greater importance to the community than the promotion of maximum residential use. In practice, however, the policy of encouraging low residential rates has worked in harmony with the policy of low industrial rates. This has been true because in the very interest of serving retail customers at minimum rates the public projects have been under the necessity of quoting low rates for industrial use. Only where there is a definitely restricted supply of low-cost hydro power, as has been the case at Niagara Falls for a number of years, may there arise a serious practical conflict between the objective of serving small consumers at the lowest feasible rates and the objective of low wholesale rates designed to attract high load factor industry.

Let me turn now to a fourth feature of federal power rate making—a feature which is in harmony with the primary objective of promoting widespread use of electricity. I refer to the fact that initial rates, insofar as they have been set by reference to cost factors, have been based upon estimates of those reduced costs that are expected to result from the large demand and the high load factors which the low rate schedules themselves make possible. In other words, the public plants, to a far greater extent than the private plants, have been operated on the philosophy of price fixing so often associated with the name of Henry Ford—the philosophy of cutting prices first and then bringing costs into line with these prices, as distinguished from the practice of allowing the reduction in price to wait upon a prior reduction in unit costs. Here we have a striking illustration of the point, long familiar to the writers of the textbooks in economic theory, that the price of a commodity may

[3] Tennessee Valley Authority Act, Sec. 11.
[4] Laws of New York, 1931, Ch. 772, Sec. 5, Subsec. 5.

affect its production cost just as clearly as the production cost may affect its price.

Will Mr. Seymour please check my impression of the extent to which rate reductions have been made in the expectation that they themselves will lead to later cost reductions. I take it that this was a policy both of the TVA and the Bonneville Power Administration in setting its wholesale rates, and I also assume that the TVA relied upon an expected future increase in demand for electricity when it set its standard rate schedules for municipal distributors at rates between 30 per cent and 60 per cent below those rates that had hitherto prevailed in the community. A number of the municipal distributors have already reduced their rates below the TVA standard. These later rate reductions, however, seem to have taken the more orthodox form of following *after* the realization of excess revenues.

A fifth aspect of federal power policies must be noted in the form of an unsettled question rather than of a firmly established principle. It concerns the problem whether or not public plants should be subject to taxation, or to payments in lieu of taxes, comparable to the very heavy taxes imposed upon private utilities. If the rates charged by the public plants were designed to serve, without qualification or correction, as yardsticks for the performance of private companies, there could be only one rational answer to this question. In that event, public plants should be subject either to outright taxes or to payments in lieu thereof designed to fall on the rate-payer with the same burden with which the private company's taxes fall upon the consumers of these companies. Quite without reference to the tax factor, however, any attempt to design the rate-making practices of public plants so that their rates can be accepted, without qualification and without close analysis, as standards for private plant performance, seems to me to be unfeasible. This opinion by no means warrants the extreme conclusion that the rates charged by the TVA municipalities or by other publicly-operated plants furnish no indication of the rates which a private company can or should charge. It does mean, however, that the bearing of the rates actually charged by a public plant in one community on the rates which should be charged by a private plant in another community is a subject for expert inference. The simple assumption that the rates ought to be the same is not warranted in the absence of careful study.

In making such a study the analyst can make allowance for tax differentials, although the making of an adequate allowance gives rise to difficulties when the differential is very large.

The 1940 amendment to the Tennessee Valley Authority Act, which may or may not set a nation-wide standard, marks a kind of a compromise between complete freedom from any tax burden and subjection

to a burden equivalent to that imposed upon private companies. Out of its own revenues the Tennessee Valley Authority is directed to pay to the states and counties in the Valley area percentages of gross revenue designed generously to offset the loss of tax revenues sustained by the states and other subdivisions from the acquisition by the TVA of reservoir land and of private utility properties. This statutory percentage of gross TVA revenue started at 10 per cent in 1940, declined until it reached 6½ per cent for 1945, and will fall to 5 per cent in 1948 and thereafter.

The various municipal and co-operative distributors, in their turn, are permitted by their contracts with TVA to charge rates which, after yielding 6 per cent on net investment in their utility plants, will secure revenues in lieu of taxes, measured by the application of state, county, and local assessment rates to the book values of their properties. It will be noted that neither with respect to the TVA itself nor with respect to the municipal distributors is any attempt made to collect from the rate-payers revenues equivalent to the *federal* tax payments of private companies. If one treats the TVA and its constituent distributors as a single operating system, the total payments of this system in lieu of taxes for the fiscal year 1944 amounted to about 7 per cent of gross power revenues as compared to the ratio of about 21 per cent for the electrical utilities of the nation.

Those who regard high public utility taxes as a desirable source of government revenue will view with regret this relatively light burden on the customers of the public plants. Without attempting to discuss the merits of this question, let me merely express the opinion that Congress acted with great wisdom in declining to impose upon the consumers of TVA power payments comparable to the taxes levied against electrical utility companies. The only plausible defense for high electrical utility taxation, totaling from 20 to 25 per cent or more of the consumer's dollar, is the defense that, under existing defective public service regulation, taxation must partly take the place of regulation in preventing the companies from making excess profits. Whatever may be the validity of this position, it does not apply to publicly-owned and -operated enterprise.

Time limits now require me to pass over a number of other aspects of federal rate-making policies in order to conclude with a brief discussion of joint cost allocation. Let me mention, however, an important difference between the rate policies of the TVA and Columbia River projects on the one hand, and the Hydro-Electric Power Commission of Ontario on the other hand. The Ontario Hydro bases its wholesale charges to the co-operating municipalities on cost estimates which vary with the transmission distance between the community that buys the

power and the location of the generating plant. That is to say, the longer the transmission distance, the higher the charge. On the other hand, both the TVA and the Bonneville Administration quote a blanket or postage-stamp rate schedule which is the same to all distributors taking their power from the federal transmission system. The relative merits of these two systems of rate making are still at issue among experts, and a decision for the one policy or for the other is likely to have a material effect on the location of those industries to which cheap power is an important factor. I hope that Mr. Seymour will give us the benefit of his views.

Still another problem of power price fixing that deserves discussion concerns the proposal, recently made before a Congressional committee, that the Reynolds Metal Company or other "independent" producers of aluminum should enjoy especially favorable contracts for the purchase of power from one or more of the federal agencies in order to put them on a competitive par with the Aluminum Company of America. My own reactions to any proposal for discriminatory rates of this character are distinctly adverse. An outright cash subsidy to support competition would seem to me to be preferable.

The last subject of this paper—that of the allocation to power of a share of the joint costs of multiple-purpose dams and other structures—has given the power experts in Washington and in the regional agencies more headaches than any other aspect of rate making. The requirement that some allocation be made and that these allocated joint costs be added to the direct costs of the power plants as a measure of the total federal investment in power facilities seems now to have become an accepted Congressional policy. Under the mandate of its statutory charter the TVA has made repeated allocations, keeping them down to date as new multiple-purpose dams have been brought to completion. According to its 1944 report, which is the last that I have seen, 40 per cent of its joint investment has been charged to power, 20 per cent to flood control, and 40 per cent to navigation.

In June, 1945, the Federal Power Commission allocated about 50 per cent of the joint facilities of the Bonneville Dam to power, the balance presumably being assigned by implication largely or entirely to navigation.[5] In a report submitted to the President by Secretary Ickes on March 27, 1945, 56 per cent of the estimated costs of the dam and reservoir at Grand Coulee is allocated to power and 44 per cent to irrigation, after the deduction of a 1 million dollar item which Congress itself had allocated to navigation and flood control. On April 20, 1943, the Federal Power Commission made an interim allocation of the costs

[5] In a sharply dissenting opinion Commissioner Nelson Lee Smith concluded that 85% of the joint costs should have been allocated to power.

of the Fort Peck Project on the Missouri River in Montana. Its provisional allocation, however, assigned to power no share of the cost of the dam.

Needless to say, a systematic discussion of the philosophy and technique of these allocations is out of the question here. I can best refer those who are interested to the able treatment of the subject by Joseph S. Ransmeier in his monograph on *The Tennessee Valley Authority* (Nashville, 1942).

In order to provoke discussion, I shall take the liberty of closing this paper with several comments on the significance of these allocations, presented with almost no attempt to support my opinions:

1. Out of a wide variety of proposed principles of allocation, the one now most generally accepted is the "justifiable alternative expenditure" principle. This is a version of the benefit theory of allocation. It differs from other benefit theories in assuming that the value of a dam for any one purpose (such as navigation) is limited by the cost of attaining that purpose by means of an alternative single-purpose project. Assume, for example, the construction at a cost of 50 million dollars of a dam serving the dual purpose of navigation improvement and of power supply. The navigation value of the dam is deemed to be limited by the cost—say 20 million—that would have to be incurred in putting up a less expensive dam or series of dams for navigation alone. Hence, the navigation value of this dual-purpose dam cannot exceed 20 million dollars. Assume, however, that the advantage to the community or nation of making the river navigable has a present value of only 10 million dollars. Under this assumption, the navigation value of the dual-purpose dam is only 10 millions.

2. Despite its widespread acceptance, the "alternative justifiable expenditure" principle, as generally applied, overlooks the fact that the construction of a single-purpose project in a river often destroys the opportunity to develop that same river for any other purpose. In ignoring this fact, the theory assumes that the advantage of a multiple-purpose river development lies merely in the saving of costs that might otherwise be incurred in securing all of the same services by separate developments. Such an assumption is obviously false. The great advantage of the multiple-purpose engineering project lies not in saving construction costs but rather in its ability to secure from a flowing stream two or more services that could not be secured simultaneously by single-purpose structures.

3. Even if this and other theoretical objections to the more plausible methods of joint cost allocation could be shown to lack foundation, the practical difficulties of an intelligent appraisal of the benefits derivable from a multiple-purpose enterprise—an appraisal that must be made in

anticipation of the receipt of these benefits—makes a hocus-pocus out of any attempt to allocate on scientific principles. By this I mean that any allocation must necessarily be arbitrary within a very wide range of error.

4. If this point is well taken, the policy of adjusting power rates with the object of making them cover not only separable costs but also allocated portions of the joint costs is defensible only on the ground that there are certain practical and political advantages in setting certain frankly arbitrary standards for the revenues to be raised by federal power projects.

5. If federal power policies were being devised anew, I should be inclined to agree with those economists, such as Horace M. Gray, who would completely ignore allocated joint costs as a factor in power pricing, thereby applying a kind of by-product theory to the rate-making practices of multiple-purpose river developments. In view, however, of the prevailing Congressional policy to the contrary, it seems to me that the question may wisely be left open pending more experience with rate-making practices under the somewhat hazy influence of allocated joint costs.

6. However, in the light of some of the theoretical objections to cost allocations on the justifiable alternative expenditure theory, I would suggest that close consideration be given to the proposal to allocate to power the entire capital cost of a multiple-purpose project minus the total estimated value of all the nonpower services supplied by that project. This latter method of allocation seems to me to have a special claim to acceptance in those cases where the construction of an alternative single-purpose project in the river would have defeated the accomplishment of the other purposes.

DISCUSSION

Clyde Olin Fisher: My remarks will be limited to the paper presented by Professor Lewis. In the main, I believe the evidence justifies the color scheme which he has put upon the canvas. I say this despite the fact that over the last decade there have been numerous trends, in diverse directions, and it is just about as difficult to formulate comprehensive generalizations in this area as it is to indicate in a brief statement "the" color of the rainbow. The truth of the matter is that state regulation over the past decade has been characterized by a riot of colors rather than by any one dominant regulatory motif. I shall attempt in the limited time available to me to comment briefly and perhaps dogmatically upon some of the problems which have been suggested by Professor Lewis.

He has limited his paper to the major economic responsibility of state commissions; namely, the establishment of rates and the various aspects of regulation relevant to that objective. It should be noted that state commissions have many responsibilities which bear no direct relationship to the fixation of rates. Measured quantitatively a state commission probably devotes more time to nonrate problems than to the establishment of rate bases and the determination of rates of return. Many problems arise as to the extension of utility service, the elimination of discrimination of one sort or another, the establishment of standards of performance and the requirement of safety measures, the determination of the proper number of taxicabs and of motor vehicles for the movement of freight, and the establishment of standards of performance required of all public utility corporations. The evidence indicates that state commissions have accomplished results less open to valid criticism in these areas than in the determination of rates. Commissions have been persistent in their campaign to insure adequate service and to eliminate unwarranted discrimination. This is not to suggest the unimportance of rate regulation but merely to avoid the wrong perspective by assuming that the rate problem is the only one falling within the jurisdiction of a utility commission and the only basis upon which regulation is to be appraised.

Professor Lewis calls attention to the conflict between federal commissions and state commissions and notes a diminution of hostility of state commissions toward what is designated "the invasion of states' rights." I doubt very much if this opposition on the part of state commissions is any less vigorous at the present time than it was ten or fifteen years ago. State commissions hold that there is a proper place for federal regulation and an appropriate role for state regulation, that the two types of regulation should be integrated, and that there should be no uneconomic duplication in this field. It would be an error to conclude that the opposition of state bodies to the further extension of federal power represents nothing more than a struggle for jurisdiction. State commissions, if I judge properly the present climate of opinion, believe that the federal agencies have accomplished invaluable results and that state regulation, without the support of these agencies, would not be adequate to meet the requirements of the present day. They insist that the Federal Power Commission was created to fill the

regulatory gap caused by the decision of the United States Supreme Court in 1927 in the so-called *Attleboro* case[1] and in those cases where, in the language of the Supreme Court, there existed an "indeterminate penumbra." They do not agree that it is necessary, or even desirable, that the federal agencies do for a state what it can do for itself. This, despite the fact that the federal agency may be more adequately manned and in a position to do, when judged by objective standards, an even better job than can be done by a state agency. Paradoxically, it means that poorer government self-imposed may be superior to better government imposed from without. This reflects a conviction that under our form of government, if one may paraphrase the dissenting opinion of Justice Brandeis in the *New State Ice Company* case[2] "the people of the state should have the privilege of stewing in their own juice if juice stewing is what they wish."

The United States Supreme Court has supported the Federal Power Commission in its major efforts though more recently it has indicated a somewhat narrower interpretation of the jurisdiction of this Commission than was claimed by it. This limitation, reflected in the case of the *Federal Power Commission* v. *The Connecticut Light and Power Company*,[3] is not displeasing to those who believe in the retention of state autonomy (including thereby the privilege of making mistakes) excepting in those fields in which the effects of regulation in one state spill over state boundaries and produce ills outside the state. Professor Lewis would probably subscribe to this political philosophy but the statement in his paper suggests criticism of the states for their campaign to maintain state autonomy in purely local matters.

Because of the limitation of time I shall be very brief and dogmatic in presenting what seem to me to be the more significant advances made in state commission regulation during the past decade. I shall not have time to develop these topics.

1. State commissions have made substantial progress in requiring strengthening in the capital structure of utilities subject to their regulation. Their efforts in this respect have been reinforced by the Securities and Exchange Commission and other federal regulatory agencies. There has been increasingly an insistence upon a substantial portion of equity money in capital structure and a reluctance to approve excessive bonded indebtedness. Unfortunately, the federal tax laws have made it more difficult to accomplish the objective in this direction.

2. As a corollary to the above, commissions during the last decade have insisted upon the substitution of depreciation accounting for the old technique of retirement accounting. The depreciation reports of the N.A.R.U.C. Committee, together with the study given to the subject by the Association, have promoted progress in this direction.

3. Closely related to the improvement of capital structure is the insistence by state commissions during recent years that utilities finance them-

[1] *Public Utilities Commission of Rhode Island* v. *Attleboro Steam and Electric Co.*, 273 U.S. 83.
[2] *New State Ice Co.* v. *Liebmann*, 285 U.S. 262.
[3] 89 L. Ed. 691.

selves on the most favorable terms available in the market. The decision of the Supreme Court in the *Hope* case, in which the Court emphasized the fiscal requirements of a utility, has placed upon commissions a greater responsibility than they formerly had to insure financing on the best terms the market will permit.

4. State commissions during the past decade have placed less reliance upon the TVA and other federal projects as so-called "yardsticks." None the less, the work done by the TVA in the utilization of promotional rates has served as a stimulus to state commissions to look with favor upon rate schedules which include the promotional feature.

5. State commissions by a large majority have never willingly attached major significance to cost of reproduction in the establishment of rate bases. The decision of the Supreme Court in the *Hope* case[4] has emancipated them from reliance upon so-called "fair value" and has given to them the green light to adopt a more realistic policy. At the present time even the utility industry seems to have reconciled itself to the utilization of investment as the proper gauge of the rate base. Many refinements still need to be made in the utilization of investment but there is every indication that cost of reproduction now plays and will continue to play a negligible role in the establishment of rate bases.

6. The federal excess profits tax has created a great deal of controversy within the field of regulation. There has been a difference of opinion as to whether the excess profits tax constitutes an operating expense. Emphasis has been given to the pronouncements of Justice Brandeis in the *Galveston* case[5] to justify the inclusion of this tax as an operating expense. The state of Michigan, however, and several other state agencies have adopted a somewhat more realistic position and have concluded, on the basis of the decision of the Michigan Supreme Court, that excess profits taxes need not be counted as operating expenses if the earnings of a utility are adequate before the point of entry of the excess profits tax. Now that the excess profits tax has been eliminated the issue is no longer of major importance.

In contrast to the positive accomplishments in state regulation as indicated hereinbefore, regulation on the state level has continued defective in a number of particulars:

1. First, there is no indication that the general public realizes the necessity for a more adequate technical staff and the making of larger appropriations if regulation is to be really effective. The progress made in this direction is far too slight.

2. I concur in the conclusion of Professor Lewis to the effect that state commissions have shown no tendency to regulate utilities in such manner as to promote full employment and complete utilization of our economic equipment. As a matter of fact, this would be extremely difficult if not impossible where there are forty-odd different regulatory agencies. Furthermore, there is no likelihood that the courts, or public opinion for that matter, would support the application of any such program that might be at-

[4] 320 U.S. 591, 1944.

[5] *Galveston Electric Co.* v. *City of Galveston*, 258 U.S. 388.

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tempted by a state commission. Something has been done, however, by the inclusion in rate schedules of fuel adjustment clauses and other escalator clauses, the effect of which is to integrate utility rates more nearly into the general economic picture.

3. Finally, perhaps the most serious defect of state regulation is the failure to do anything to provide an incentive to better performance. In the past the regulatory "lag" has prevented some of the ill effects of the "cost plus" basis upon which utility rates have been established. If regulation becomes more effective and expeditious this lag should tend to disappear. Already many representatives of regulatory agencies are giving consideration to the establishment of objective standards by which utility performance may be measured. In my judgment one of the most fruitful lines of investigation for the future lies in the direction of the promulgation of such standards which will permit a correlation of earnings and proved efficiency.

Archibald M. McIsaac: I find myself in substantial accord with Professor Lewis' stimulating appraisal of the course of public utility regulation during the past fifteen years of depression and war. I think that he has properly placed the emphasis on the underlying secular developments in regulation during that period rather than on the more ephemeral phases of these distorting sequences of events.

From his appraisal he has drawn two general conclusions. First, that within its own field utility regulation gives promise of fulfilling its protective functions, but is unlikely to prove an effective promotional agent or a means of implementing broader social and economic policies. Second, that we have not yet developed—and are not likely to develop—within our framework of regulatory concepts and procedures, a rationale of control that can be extended to other segments of industry with any hope of improving the functioning of the general economy.

I am very strongly inclined to agree with Professor Lewis' second conclusion, and to accept his first conclusion as a reasonable though perhaps pessimistic forecast. Undoubtedly the first task of the regulatory agencies is to consolidate the ground that has been gained in the final *Hope* case break-through in the old lines of valuation doctrine. However, I would urge that that should not mark the end of the campaign. Rather, the regulatory agencies now have an opportunity and a responsibility to extend the orbit of their analysis beyond the static confines of cost determinations and already established demands.

The grounds for supposing that this may be possible appear to me to exist in the opinions of the *Hope* case itself. The majority opinion[1] emphasized the broad scope of the regulatory authority of Congress to regulate the prices of commodities in interstate commerce and referred benevolently to prior rulings of the court bearing on the application of controls in other areas to which the doctrine of fair return on fair value had not generally been extended.[2]

[1] 320 U.S. 591, 601, 1944.
[2] For example, the decision in the *Nebbia* case sustaining the constitutionality of the New York State milk control law. 291 U.S. 502, 1934.

Moreover, in liberating the regulatory agencies from the incubus of traditional fair value rules the majority underlined the discretion of these authorities in the oft-quoted statement that "it is not the theory but the impact of the rate order which counts. If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry under the act is at an end. The fact that the method employed to reach that result may contain infirmities is not then important."[3] To be sure the Federal Power Commission had departed from past practice chiefly in basing its valuation on prudent investment, without giving lip service to other traditional considerations. Hence the approval of its procedure cannot be regarded as giving a carte blanche to more novel deviations from the ancient party line. Yet the door can scarcely be said to be closed to exploratory ventures into new terrain.

That some measure of experiment might not be foredoomed to failure is furthermore suggested by the viewpoint expressed in the dissenting opinion of Justice Jackson, to which Justice Frankfurter lent his general approval. Justice Jackson's dissent was not based on the view that the majority opinion had gone too far, but on the more significant ground that it had not gone far enough. He agreed with the majority in freeing the regulatory agencies from the necessity of observing ancient shibboleths of present value, and approved the use of prudent investment in arriving at a valuation of transmission facilities. But he challenged the propriety of pricing natural gas in the field on the basis of investment, prudent or otherwise, in gas field development, on the ground that there was no direct connection between the cost of field development and the value of the product.

Instead he urged that the price of gas in the field could more appropriately be established "as one would fix maximum prices of oil or milk or any other commodity." He said:

> Such a price is not calculated to produce a fair return on the synthetic value of a rate base of any individual producer, and would not undertake to assure a fair return to any producer. The emphasis would shift from the producer to the product, which would be regulated with an eye to average or typical producing conditions in the field.
>
> Such a price-fixing process on economic lines would offer little temptation to the judiciary to become backseat drivers of the price-fixing machine. The unfortunate effect of judicial intervention in this field is to divert the attention of those engaged in the process from what is economically wise to what is legally permissible.[4]

To be sure Justice Jackson's proposal that the case be remanded to the Commission to work out something along that line was not accepted by the majority, and so cannot be regarded as more than a minority incitement to insurrection. It is likewise clear that Justice Jackson himself did not dissent from the idea that cost provides an acceptable basis for pricing the services of physical facilities as contrasted with goods.

Nevertheless one may perhaps wonder if regulatory agencies could profitably exercise some of their new freedom in the cautious exploration of alternative or supplementary measures of regulation, to determine their applicability to the pricing both of commodities such as gas in the field and of services as Justice Jackson conceives them.

[3] 320 U.S. 591, 602, 1944.
[4] *Ibid.*, 651.

That times have indeed changed is suggested by Justice Jackson's implication that the existing mechanisms for price fixing in the areas he specified constitute a general rationale for fixing *both* maximum and minimum prices under normal conditions.

Be that as it may, it would seem that the time is ripe for a consideration of alternative or supplementary techniques of price making to determine their possible usefulness in the utility field.

It must be conceded that prewar standards of control in these other industries were vague and unprecise, even in comparison with contemporary standards of utility regulation, and that the market conditions were such that the question of a fair return on capital investment did not arise as a practical issue.[5] Our experience with controls in other fields may therefore appear to be irrelevant.

I am inclined to think, nevertheless, that one important feature of the development of regulation in those areas, and, even more, of our wartime experience, was the development of a broad point of view in approaching basic questions of control. These were necessarily tackled in terms of an entire industry or, at least, of an entire market rather than in terms of particular suppliers. The problems, then, were mainly those of adjusting total supplies to existing or foreseeable demands. And while consideration was given to costs, the costs to be considered were those of evoking the necessary supplies. Supply line analysis could, and in some instances was, employed as an aid to cost determinations.[6]

One question that arises from a consideration of controls in other areas is whether greater emphasis might not be placed in the future on a general or regional rather than on a company-by-company approach to the problem of establishing utility rate levels and schedules. The question would then be one of determining the appropriate level and structure of rates, not with reference to the costs of any particular company, but with regard to the whole structure of demands, both existing and potential, in the area involved, and with reference to the necessary costs of providing the requisite service to the entire area.

In such a determination the peculiarities of any particular local situation would not govern the over-all result, but could be correlated in one way or another with it. The necessary capital costs involved in providing service could not be overlooked, nor could the conditions surrounding the attraction of additional investment funds be neglected, but they would be generalized rather than particularized considerations. There would likewise be an opportunity for applying reasonably direct profit incentives to companies that were able substantially to improve their operations in comparison with the norm or average of performance. And it is probable that greater use could be made than at present of interarea or interregional comparisons of rates and performance in determining what constitutes a reasonable level of rates or a proper schedule of charges.

[5] See, *Economic Standards of Government Price Control* (TNEC Monograph No. 32, 1941).
[6] *Ibid.*, 452, 458–459.

Obvious difficulties stand in the way of the use of such an approach by state agencies, of which one of the most important is, no doubt, the lack of conformity between state boundaries and the areas for which any such generalized procedure might be appropriate. Such difficulties might be met, in part at least, by joint action by the agencies of several states, with the aid of their opposite federal numbers.

One other point, it seems to me, requires emphasis in the light of Professor Lewis' appraisal; namely, that the greater freedom that commissions now enjoy in the exercise of their own discretion correspondingly increases their responsibility for formulating and clearly stating the standards by which they profess to operate. Lacking clearly defined and consistent standards, regulation cannot escape the charge of opportunism, nor can it be subjected to effective public scrutiny, criticism, and evaluation. If the regulatory agencies fail, on the whole, to develop a rationale for the exercise of their new freedom that is explicit, rooted in sound analysis, and effectively presented, there is danger that regulation may again come, by default, to be hedged about by legalistic rules developed *ad hoc* by the courts.

Edward W. Morehouse: My appraisal of Commissioner Smith's paper starts with his avowed purpose "to afford a factual basis for judgment as to both the extent and the desirability of the Commission's influence upon developments in the utility rate-making field, as well as to indicate some of the more troublesome economic questions which have arisen."

In my opinion, Commissioner Smith has done an artistic, adroit, and deft job of picturing the FPC as the Sir Galahad of regulation. He has emphasized the direction, more than the goal, of the Commission's efforts to establish principles for determining the rate base, depreciation, and rate of return and for allocating costs. There is no question but that the Commission's influence in these areas has been extensive and weighty, more particularly (1) in minimizing, if not retiring, the cost of reproduction theory of valuation, (2) in emancipating commissions from court-prescribed formulas, (3) in cleaning up balance sheets and tightening up accounting procedures generally.

As for the "desirability" of the FPC's influence, I have mixed feelings. In some directions I think the Commission's influence has been constructive and wholesome, although in other directions I think they have either gone so far as to somewhat impair confidence in their impartiality or reasonableness, or have not clarified their real aim or goal, which gives rise to suspicions of bias.

I recognize the difficulties of a person holding public office to speak out plainly in public discussion. Nevertheless, I feel that Commissioner Smith has not made wholly clear just where he personally stands, or just where the Commission is heading, on certain aspects of some issues. This, in my opinion, is regrettable and makes an otherwise admirable paper fall somewhat short of complete persuasiveness. I think it is in the interest of the utilities being regulated as well as their consumers and investors to have these

issues and goals brought into the open, discussed frankly and dispassionately, and settled. The regulated utilities would then have no ground, or at least less ground, for suspecting a "birch rod in the closet."

Let me be specific.

There is the issue of federal versus state regulation on which the record of the FPC is not of the best. Commissioner Smith claims for his Commission the lion's share of the credit for submerging reproduction cost and for making "an investment standard" the dominant, if not sole, criterion of the rate base. He touches only very lightly on state commission efforts in this direction. As a matter of fact, the FPC came in on only the last lap of this campaign, and it established its principles largely in cases involving a young, hitherto unregulated natural gas industry. In my opinion, good regulation —and a scrupulous observance of the limited jurisdiction of the FPC— would avoid demeaning the influence of state commissions, some of whom are already suspicious that the FPC is trying to usurp, not supplement, state control. I think all parties would benefit from clarification of jurisdictional lines and avoidance of federal-state conflicts.

"An investment rate base" is the avowed policy of FPC. But Commissioner Smith does not make wholly clear what he or the Commission means by "an investment standard." Is it the investment of the present or original owner? He avoids the issue of including Account 100.5 "acquisition adjustment" items in the rate base, saying it has not come up in a rate case, it is less than 5 per cent of the cost of plant, and this "troublesome" question must be dealt with case by case.

It may be argued that if Account 100.5 is only 3 or 5 per cent of the investment, recognition of 100.5 as properly includible in an investment rate base is of minor importance. Reluctance to take this step and thus to remove the issue from controversy may be presumed to indicate a concern for the principle involved and hence a preference for original cost to the original owner as the measure of the rate base. This interpretation is fortified by the insistence that 100.5 assets are of no legitimate value or of diminishing value and hence that, as an accounting procedure, they should be written off against income (e.g., stockholders) rather than disposed of in the same manner as depreciable investments. Once 100.5 assets are written off or partly amortized, the question arises whether in a rate case the FPC would regard their inclusion in a rate base as "reaccounting." This is a matter upon which early clarification of the Commission's position is desirable.

On depreciation, the most important FPC contribution, according to Commissioner Smith, is consistency between annual and accrued depreciation. Certain state commissions said a lot on that subject long before the FPC did. He also states that "depreciation reserves which have been properly accrued on the books of the company in the past" have been used as measures of accrued depreciation. Elsewhere he makes clear that the Commission favors the straight-line method of accrual.

There are several deficiencies in Commissioner Smith's discussion of de-

preciation, the principal one being a failure to bring out a real problem of equity between ratepayers and investors. He does not state what are "proper accruals" nor for how long in the past they must have been accrued. On January 1, 1937, depreciation accounting displaced retirement reserve accounting which was considered "proper," or at least permissible, until that date. Does Commissioner Smith claim that "straight-line" depreciation now being proper, consistency and equity to consumers require calculation of a straight-line reserve requirement as the proper measure of depreciation, just as though the company had followed depreciation accounting throughout its past history? Such views are within the ambit of the principles as he states them. Such a position, however, under the guise of consistency and equity to consumers, is often inequitable to investors, because it, in effect, requires "reaccounting" for depreciation prior to January 1, 1937. Moreover, this position assumes that accrued depreciation in the "man-on-the-street" sense is properly measured by a straight-line depreciation reserve requirement, which, in my opinion, would only be by chance.

I get the impression that the Commission believes rates of return should go down with the yields at market prices. Just when is not made clear. If the Commission intends rigorously to follow this path and to cut rates of return simultaneously with reduced market yields, I fail to see the logical consistency of this position and the use of original cost for a rate base. Surely the Commission does not intend to oust "reproduction costs" in determining rate bases and adopt them in determining rates of return! In his oral presentation Commissioner Smith pointed out that great weight was given to historical costs of capital but in his written paper he does not do his cause full justice since he fails to point out that over-all rates of return of 6 to 6½ per cent must have given considerable weight to the historical costs of capital to the company affected.

I was most interested, however, in the invitation to think about encouraging efficiency. This is periodically mentioned as a desirable inquiry, but any notable progress along this line has escaped my notice. Regrettably, regulatory, tax, and labor pressures seem to be pushing fairly steadily in the reverse direction.

If there were time, I would like to comment on the matter of cost allocations. All I can say briefly is that Commissioner Smith foreshadows more frequent use of cost allocations by classes of service to enable the prescription of definite rates. In general, I think such allocations of class costs are less reliable than he seems to think.

Finally, to round out the picture, consideration should be given to certain activities of the Commission, its individual members or staff, which are not expressly mentioned in Commissioner Smith's paper. He may assert that these are outside the subject. But in my opinion they bear upon the Commission's rate regulation, if only because they reflect attitudes of mind.

Shortly before we entered the war, and even after, a power requirements survey was made by FPC. Warnings of a dire power shortage were used in support of a list of proposed new power projects, many of them federally

financed. Some people derived the impression from such activities that "yardstick" regulation of private utilities by public power competition was one of the aims of the FPC.

Finally, statistics and publicity should not be ignored as influential tools of regulation. The Commission publishes a rate book and annual comparisons of bills for retail electric service, although such service is outside their jurisdiction. Compilations of statistics are also published. A great deal of this material is legitimate and useful but sometimes there are lapses or abuses by those who prepare or use the material. One such lapse, I think, was the recently issued pamphlet, *The Financial Record of the Electric Utility Industry, 1937–44.* From this widely publicized document, I learned that the industry's improved financial position was attributable "in considerable measure" to "strengthening of regulatory controls, particularly the enforcement of the new uniform systems of accounts during the period under review." Apparently the efforts of utility managements were of minor significance, as seen by the writer of this pamphlet. Also, curiously, the war was mentioned only once—in the last paragraph.

Despite the many valuable statistical activities of the Commission, such publicity as to the potency of accounting controls raises a question in the minds of those subject to its regulations. This question is whether the end of the FPC road is another "reasonable-earnings" formula—an original cost rate base, determined only from the accounts, with rates of return based on current yields at market prices. Where Commissioner Smith stands as to this goal is not made clear in his paper.

If that is the end of the road, then I think the FPC will be dodging the responsibility which, in the *Hope* case as I read it, was placed on regulatory bodies when, without court guidance, they determine reasonable earnings, not by any formula, but by informed and reasonable judgment.

LESLIE T. FOURNIER: My assignment, to discuss Mr. Smith's paper on *Rate Regulation by the Federal Power Commission,* is a most agreeable one. If I have any criticism of his able and informative remarks, it would be to suggest that he has been unduly, although perhaps understandingly, modest about FPC regulatory achievements in the period since 1935. For example, to mention one development which he has not especially stressed, I think one of the outstanding accomplishments of the Federal Power Commission, which ranks along with its successful advancement of the investment rate-base principle, has been its original cost investigations and orders. The resulting reformation of the plant accounts of electric and natural gas utilities has been and will continue to be a most useful handmaiden of utility regulation, not alone in the area of rate making, but also in the regulation of security issues. Some idea of the extent and importance of this phase of the Federal Power Commission's work is given in a release issued by the Commission on January 17, 1946, to the effect that, since January 1, 1937, write-ups and other adjustment items, totaling more than 1 billion dollars, have been eliminated from the plant accounts of the electric utility indus-

try pursuant to orders of the Federal Power Commission. I am informed that this 1 billion dollar of write-ups, intangibles, and acquisition adjustments represented 27 per cent of the original cost of the properties involved. It is also interesting to note that approximately 75 per cent of the billion dollar adjustments thus far ordered by the Commission represented Account 107 items (write-ups) and 25 per cent, Account 100.5 items (acquisition adjustments). I venture to suggest that, paradoxical as it may seem, investors in utility operating company securities, including common stockholders, will benefit greatly, along with consumers, from the purging of write-ups from utility company balance sheets. This will result from the increased confidence that informed investors will have in the integrity of the companies' accounts after they have passed through the Commission's dry-cleaning process. There are few informed students of public utility regulation who would not make a bow to the Commission for the leadership it has taken in this work under the direction and supervision of its able Chief of the Bureau of Accounts, Finance, and Rates, Charles W. Smith.

There is another phase of the Commission's work which certainly deserves mention; namely, its studies of electric rates, its national rate book, in which are published annually rate schedules and typical bills for residential, commercial, and industrial use throughout the country. These have been among the Commission's most influential publications. They have been credited with important improvements in regulation and management. They have stimulated more progressive rate policies and have encouraged voluntary rate reductions. Similarly, these and other statistical publications issued by the Commission have directed closer attention to costs and other conditions responsible for differences in rates.

Those who have been familiar with the long struggle to free rate regulation from what Commissioner Smith has aptly termed "the shackles of the valuation method" will agree that the Federal Power Commission has made an outstanding contribution in the fight to put an end to the fair value rule. Under the circumstances, it is appropriate to note that the demise of the fair value rule was officially proclaimed by the Supreme Court in 1944 in the case of *Federal Power Commission* v. *Hope Natural Gas Company*. Subsequent decisions by the court, notably in the *Colorado Interstate Gas* case and in the *Panhandle Eastern Pipeline* case, have eliminated any doubt, if any remained, that a new era of regulation has been launched.

Mr. Smith has adverted also to the service which the Commission has performed in developing and improving regulatory technique with regard to depreciation and the fair rate of return. Commissioner Smith is especially qualified to discuss the work of the Commission in each of these respects. He was the chairman of the Depreciation Committee of the National Association of Railroad and Utilities Commissioners which produced a comprehensive and authoritative book on depreciation in its 1943 report. The principles developed in this report and in the 1944 supplement, dealing with problems of transition from retirement reserve methods to straight-line depreciation, are the same as those which the Federal Power Commission

has utilized in its determinations in that field. Again it is a hopeful sign that the Commission's depreciation methods and determinations are being uniformly sustained by the courts.

The quality of the Commission's thinking and work with regard to the computation of fair rates of return has been of a high order. Fortunately, the importance of precision in this aspect of regulation is becoming more generally recognized by regulatory commissions. If, for example, a 6 per cent rate of return is allowed in a rate case where 5 per cent is adequately compensatory, the effect is equivalent to allowing a 5 per cent return on a 20 per cent increase or write-up of the rate base. I stress this fact because it has not been uncommon for regulatory commissions to devote great energy and care to the disallowance of unwarranted items from the rate base and then toss away a substantial part of the advantages of that precision by a cursory or casual determination of the rate of return. This factor has become of increasing importance in recent years because of the refunding of utility bonds and the refinancing of utility preferred stocks on a steadily declining cost-of-money basis. This phenomenon is reflected also in the improvement that has taken place in the market for utility common stocks, with the stocks of well-regarded companies currently selling on between a 4 and 5 per cent dividend yield basis. In the *Hope Natural Gas* case, the Supreme Court observed that a regulated utility's revenues should be adequate to cover operating expenses and the capital costs of the business, which include service on the debt and dividends on the stock. As Mr. Smith has noted, the cost-of-capital method of fixing a fair rate of return is the subject of continuing research by the Commission's staff. The basic data supporting the use of the method have been described in general terms in a number of the Commission's decisions, one of the more recent being the *Mississippi River Fuel Corporation* case last November. It would be highly useful and informative if the Commission would publish periodically the various schedules of financial and economic data which it compiles in its rate-of-return studies. Parenthetically, I may add that there is a good description of the cost-of-capital method in the Findings and Opinion of the Public Service Commission of the District of Columbia in the last *Potomac Electric Power* rate case. The decision was rendered in July, 1944.

I agree that one of the still unsolved problems of utility rate regulation is "whether the conventional plan of rate making on a fair return basis provides properly for that incentive to enterprise and efficiency on the part of private management which must be provided if regulation is not to defeat its own purposes and is truly to serve the public interest." This is not a new question. It was recently considered by the District of Columbia Commission in the *Potomac Electric Power* case and was one of the reasons cited for its decision to retain the sliding-scale principle of rate determination on a modified basis. On this point, the Commission stated that "the incentive provision inherent in the use of a basic rate of return enables the utility to enjoy limited profits in excess of a basic rate of return, thereby encouraging the practice of operating and financial economies." Of course, the sliding-scale method as applied by the District of Columbia Commission is not a

substitute for the conventional approach to rate making. It follows the conventional approach and simply adds to it a profit-sharing arrangement. Now that most, if not all, of the more controversial aspects of the conventional methods of rate regulation have been resolved, it is to be expected that increased attention will be given to the still unresolved problem of insuring the maintenance of adequate incentives for efficient and progressive management.

In the time that remains I should like to comment briefly on the subject of natural gas rate regulation by the Federal Power Commission. In this field, for the reasons given by Mr. Smith, the Commission's rate orders have resulted in astonishingly large rate reductions applicable to gas sold to distributing companies for resale to the ultimate consumer. Since the development of federal regulatory technique with respect to natural gas rates is relatively new and the issues at stake are large, it is not surprising that extreme differences of opinion have arisen between the regulated companies and the Commission with respect to certain of the Commission's regulatory principles and methods. Some of the more important controversies have been described most effectively by Mr. Smith. Outstanding among these are, first, the cost allocation problem involving the segregation of costs between regulated and unregulated business, between different points of delivery on a long pipe line, and between interruptible and noninterruptible sales; and, second, the problem of whether the Commission should follow the method of including the production and gathering facilities of a natural gas company in the rate base in the conventional way; or, in the alternative, whether it should include as this element of the cost of gas, the going "field" price. With respect to each of the major questions, cost allocation on the one hand and the treatment of production and gathering facilities on the other, Mr. Smith has indicated that further consideration and examination of the present methods and techniques are needed and will be undertaken. This attitude is no less than one should expect from a regulatory agency that is conscious of its administrative responsibilities.

As has been pointed out, the provisions of the Natural Gas Act are specifically inapplicable to the production or gathering of natural gas. As also stated, when gas is independently produced and sold at arm's length to a natural gas company subject to the Commission's jurisdiction, the purchase price paid is allowed as a cost in a rate proceeding. But where a natural gas company produces all or part of its gas supply, there is the question of determining how such gas should be valued for rate purposes. Some of the economic aspects of this issue have been admirably outlined by Mr. Justice Jackson in his separate opinions in the *Hope* case and the *Colorado Interstate Gas* case. On the legal or constitutional aspects of this issue the Court was nearly equally divided, with four Justices taking the position in the *Colorado Interstate* case that the result reached by the Commission was unauthorized by the statute. Interesting also is the fact that the decision of the Court left the Commission free to depart from the rate-base method, while also holding that the Commission is not precluded from using it. The present situation, then, is that one Justice of the Court has made a most

convincing argument for abandoning, on economic grounds, the rate-base approach to the production and gathering aspect of rate regulation; several Justices of the Court have concluded that the Commission exceeded its jurisdiction when it included the production and gathering facilities together with the transportation and distribution properties in a single rate base; the ruling decision of the Court itself leaves the Commission free to choose an appropriate alternative method; and finally we have Mr. Smith's admission that the problem should receive further consideration.

WALTON SEYMOUR: Perhaps the most helpful way to discuss some of the ideas which Dr. Bonbright has expressed will be to speak in terms of our actual experience in the Tennessee Valley. I shall not attempt to do more than to sketch out briefly for you the specific policies and how they have worked.

First, the "Henry Ford" principle as stated by Dr. Bonbright means to us only that in fixing rates for electricity for the purpose of maximizing its benefits to the people of the region, the dynamics of the power business should be given full consideration. The original TVA rates, we can now say without qualification, were clear and completely successful examples of the usefulness of this concept. They represented a reduction of about 50 per cent from existing rate levels in the region in 1933. They were based on the assumption that average residential use would double and it has trebled. We are satisfied, on the basis of this experience, that any region in America can achieve much greater levels of use of electrical energy if it is given half a chance from the rate standpoint. I say half a chance because our experience has demonstrated that the original TVA rates were not too low, but are higher than they need to be under reasonably normal circumstances. Nine distributors of TVA power have cut the residential rate by 25 per cent and the commercial rate by 20 per cent and are still showing substantial net income. Many others are contemplating similar reductions. We are confident that new records in low electric rates will soon be set in the Tennessee Valley.

Perhaps the most constructive contribution of the low-rate policy of TVA has been in making really low rates available to domestic, rural, and small commercial customers. TVA rates are low for industrial use, too, but here it is for much the same reason that a utility company would grant a low rate to industry; namely, in order successfully to compete with other sources of industrial power. Rates for industry are set at levels which not only cover costs but are no lower than are necessary to develop the desired amount of business, thus maximizing revenue returns. To put it another way, the federal power policy, as applied in the TVA region, has not necessarily led the way in promoting the idea of low rates for *large* customers but it has been far in front of most of the utility industry in sponsoring low rates for *small* customers. In the Tennessee Valley we believe that this has proved to be not only sound public policy but sound business policy as well.

Next, I shall refer to TVA's blanket rate policy which was decided upon right at the beginning. It, too, has proved out. We have one wholesale

rate schedule for all of the local community enterprises which are distributors of TVA power and we now serve 138 of them—46 co-operatives and 92 municipalities. The most important reason for the adoption of this policy was that TVA was engaged in a public business and had definite responsibilities and obligations in the promotion of public welfare throughout its entire area. The blanket wholesale rate permits equal development of the various communities in the region and tends to maintain a balanced agricultural and industrial development. All distributors of TVA power are given the same advantages in the cost of electricity regardless of location.

The TVA Act does not specifically require such a policy but it implies it by directing that TVA power shall be developed for the benefit of the area as a whole. Therefore, powerwise, the communities on the Tennessee River are not favored to the potential disadvantage of others not so favorably located.

There are also sound practical reasons for the blanket rate policy. TVA operates a far-flung interconnected transmission network fed from many sources of supply, several of which are widely separated. There is no way that the cost of power to any one point can accurately be determined.

TVA's acceptance as a federal partner, operating on a regional basis, by the local community enterprises which distribute TVA power depends entirely on the degree of local confidence in TVA's good faith. The blanket rate policy presented right at the start convincing evidence of TVA's willingness to treat each community as an equal part of the region. Differentials based on distance from source of supply could not have been justified at a time when the geography of power market development was so uncertain. The costs of power delivery are affected substantially by magnitude of requirements as well as by distance from supply.

In furtherance of its power program and Congressional policy, TVA urged the distributors of TVA power to undertake the service obligation for each of their respective areas at uniform retail rates. Had TVA's wholesale rate been subject to variations with distance, the same kind of variations would have been insisted upon by many of the distributors in their retail rates to the ultimate consumers. The blanket wholesale rate thus contributed directly to the aim of obtaining the lowest possible rates for the people throughout the region.

Considering all of these factors, the blanket rate has been a sound policy for TVA and we are confident that it was the safest and fairest basis which could have been devised in the early days.

Dr. Bonbright referred to the federal interest in the retail rates for federal power sold to ultimate consumers. TVA's wholesale power contracts provide the connections between federal power policy and local power policy. The provisions of those contracts governing retail rates have been essential to the development of our power program. We believe that the mechanism of the TVA power contract has been depended upon by the leaders in the local communities who have supported the TVA power program as assuring the consumers of the region of the benefits of the widespread use of the region's power resources at the lowest practicable rates. I would therefore say it is

very important that the regional federal agency should have a responsibility with regard to the local retail rates at which the power is resold.

Strong pressures exist in local communities to which federal power may become available to keep retail rates high and use the proceeds of the community electric business for the reduction of taxes. The TVA power contract provides a bulwark against these influences in the Tennessee Valley.

Mention has been made of the recent discussion of the possible need for subsidies to promote competition in the aluminum business—discussion which has resulted in proposals being advanced for the granting of special preferential subsidized power rates to producers of aluminum, or some of them, by the federal power agencies. The talk has been of power rates of "one mill per kwh or less." We have opposed such suggestions and shall continue so to do. If there are to be federal subsidies they should be made directly by an agency which is given responsibility for seeing to it that the subsidies yield results.

TVA does not have a supply of power which will go to waste if it is not purchased by the producers of aluminum. We are confident that these customers will find it to their advantage to buy TVA power to operate their plants at full capacity. We stand ready to serve them. We have offered rates to industry which are the lowest available east of the Rocky Mountains. If, however, the producers of aluminum find that they can operate more economically at other locations, we believe that their decision to do so would be entirely proper. In that case we should expect to find other purchasers for the power which we anticipate that the aluminum industry will use.

Dr. Bonbright has stated the facts concerning the policies followed in the Tennessee Valley with respect to in-lieu tax payments. I shall not attempt to discuss this matter further in the time which has been allotted to me.

On the subject of allocations of multipurpose costs, I can say that TVA's allocation based on the principles originally established with our expert consultants has been successfully defended and has served as a source of strength in our accounting and as a very useful basis for judgment in financial and economic analyses. At some stages in the history of multipurpose projects it is necessary to determine whether the interests of the ratepayers and those of the taxpayers are being equitably served at existing power rate levels. A considered allocation of costs may permit more precise answers to such a question than can be obtained in any other way.

The allocation of costs among the purposes served by a multipurpose project should not be regarded as useful only for rate-making purposes. It also forces the administrators to do some close thinking about the values represented by the various purposes both in planning the project and in its operation. Without a definite allocation of costs there would be real danger that values would be so merged and blurred that serious errors in emphasis could and would be made.

An important point is that the more closely you can define the responsibilities of the power manager of a multipurpose system from a financial standpoint, the more definite become the measures of economy and efficiency which he can use in developing the morale of his organization.

POSTWAR RAILROAD PROBLEMS

THE MAINTENANCE OF RAILROAD CREDIT

By Ralph L. Dewey
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I

Maintenance of railroad credit is a matter of importance, not only to investors, but also to the public at large. If good service at reasonable cost is to be made available to patrons, the carriers must annually spend large sums for improvement and expansion of facilities, and, in the immediate future, for the rehabilitation of plant and equipment. These outlays will be much greater than those actually made in the thirties. Some of the new money can be provided out of rail resources, but a significant portion must be obtained either through the public money markets or from the government. Insofar as the railroads resort to private investors for funds, they must be in a sufficiently strong earnings position to make rail investments attractive in comparison with those of other enterprises.

Now that the war is over, many people are apprehensive about the future soundness of railroad credit. Vivid in their minds are the financial difficulties of the railroads during the decade after 1929. They recognize that the war has greatly improved the rail position, but they fear that current prosperity is only a passing phase and that it will be replaced by low earnings and depressed security values when the economy returns to "normalcy."

In this paper, I am chiefly concerned with the outlook for rail credit and what can be done to maintain it in a healthy state. In order to reduce the large number of uncertainties naturally involved in a discussion of this kind to manageable proportions, I shall make and adhere to three assumptions: First, that the railroads will continue to be privately owned and operated; second, that government will continue to promote competing modes of transportation by one means or another; and, third, that the present system of regulating transportation agencies will be retained without fundamental alteration. Of course, I am not predicting that any or all of these assumed conditions will turn out to be true in fact, but I think they afford a reasonable basis on which to proceed with the discussion.

II

Rail credit was in a deplorable state in the depression and prewar years. Partly as a result of increasing diversion of traffic to competing modes of transportation which began in the twenties, but largely be-

cause of the crisis and depression, rail revenues declined about 50 per cent after 1929, or from more than 6.0 billion dollars per year in 1928 and 1929 to slightly more than 3.0 billion in 1933. Poor rail finances were accentuated by the presence of fixed charges of about 700 million dollars a year at the beginning of the depression. Net income was small or nonexistent from 1932 through 1935 and again in 1938. Rail stocks declined from a peak predepression value of $133.71 per share in 1929 to a low of $28.73 in 1932. Rail bonds fell from a high of $95.97 per $100 face value in 1928 to a low of $56.52 in 1938. The total value of rail stocks and bonds was lowest in 1938, when the amount was about 8.7 billion dollars. This was a reduction of 57 per cent from the peak value 20.3 billions in 1929.[1] In terms of mileage operated and investment, rail insolvencies were also at an all-time maximum in 1938.

During the war, rail credit staged a striking recovery from dreary depression levels of low earnings and unsatisfactory security values. Earnings on each $100 of capital stock of Class I line-haul railroads, as measured by net income after operating expenses, rents, taxes, and fixed charges, for the fiscal year ending June 30, 1945, were $8.43. These earnings per share were nearly four times as great as those in 1940.[2] Rail stocks doubled in value between 1940 and 1945,[3] and rail bonds increased about 38 per cent in value between these years.[4] The number of insolvent railroads declined from a depression peak of 109 lines in 1938 to 76 carriers at the end of 1944, and their deficits in net income were converted into substantial profits. For instance, their fixed charges in 1944 were covered by income in the ratio of 1.70 to 1. The 76 carriers held about 17 per cent of the total capitalization of all roads in 1944.[5] Further financial reorganizations of railroads were completed in 1945. By September 30, 1945, reorganization plans approved by the Interstate Commerce Commission, including plans already put into effect, provided for a total reduction of about 45 per cent in long-term debt and 73 per cent in fixed charges.[6] The larger cut in fixed charges than in

[1] W. H. S. Stevens, "Railway Financing, 1890–1940," in National Resources Planning Board, *Transportation and National Policy*, H. R. Document No. 883, 77th Cong., 2nd sess., 1942, p. 171.

[2] Bureau of Transport Economics and Statistics, Interstate Commerce Commission, *Monthly Comment on Transportation Statistics*, Sept. 10, 1945, p. 5. Earnings per share were $13.50 in 1943 and $9.33 in 1944. *Ibid.*, p. 5.

[3] Index numbers of 20 railroad stocks, with 1935–39 as 100, published in Standard and Poor's *Trade and Securities Statistics* were as follows: 1940, 71.1; 1941, 70.6; 1942, 66.1; 1943, 88.7; 1944, 100.9; and July, 1945, 140.1. The index, after falling to 130.9 in August, rose to 145.1 in October.

[4] Index numbers of medium and lower grade railroad bonds, stated in dollars per $100 bond, published in Standard and Poor's *Trade and Securities Statistics*, were 83.76 for 1940; 86.88 for 1941; 86.61 for 1942; 97.28 for 1943; 107.36 for 1944; and 115.2 for July, 1945. There was little change in these values between July and October.

[5] Bureau of Transport Economics and Statistics, Interstate Commerce Commission, *Steam Railways in the Hands of Receivers and Trustees on December 31, 1944* . . . , Oct., 1945, p. 2.

[6] Bureau of Finance, Interstate Commerce Commission, Statement issued as of Sept. 30, 1945.

debt was due to the use of contingent interest obligations in the new capitalization.

There are other evidences of strengthened rail credit growing out of the war. New capital investment was more than 2.0 billion dollars for the years 1941–44 inclusive. Total debt has been reduced by more than 1.0 billion dollars and fixed interest charges by more than 20 per cent since 1940. Net working capital of Class I railroads was about 1.9 billion dollars at the end of August, 1945, as compared with 799 millions at the end of 1941, or an increase of 141 per cent during the war.

The current picture of rail credit while generally bright also has some unfavorable aspects. Reorganization progress has been slow, and at the end of 1945, some of the largest roads of the country were still in the hands of the courts.[7] Also, in spite of considerable debt retirement during the war, total rail long-term debt at the end of 1944 was about 9.8 billion dollars or 55 per cent of the total capitalization of 17.8 billions.[8] Rail fixed charges are still more than 500 million dollars per year.

III

Reference was made earlier to the needs of the railroads for funds to rehabilitate their plant and equipment. Outlays will be especially necessary to make good the accumulating deferred or undermaintenance of property during the war years. During 1944, rail expenditures for maintenance of way and structures and maintenance of equipment, exlusive of charges for depreciation and amortization, were at the highest rate in their history, the figure being about 2.9 billion dollars. It was 24 per cent larger than in 1929 and more than double the average for the eight-year period 1934 to 1941. The high wartime expenditures, however, were not as effective dollar for dollar as previous expenditures had been. Among the factors which explain this difference are the high wartime costs of labor and materials, uneconomical repairs of old equipment which had to be retained in service because replacements were not available under priorities' regulations, and reduced efficiency of maintenance labor, partly because of the rapid turnover and inexperience of the personnel, and partly because of the increased traffic density which resulted in loss of time to permit trains to pass. It seems likely that the expenditures for maintenance during the past four years, large as they have been, would have been much larger if additional labor and materials had been available. This situation, together with the excessive wear and tear on facilities caused by the high record volume of traffic,

[7] Included in this category are the Milwaukee, the Missouri Pacific, the Rock Island, the Frisco, the St. Louis Southwestern, the Denver and Rio Grande Western, the Seaboard Air Line, and the New Haven. The preponderance of the insolvent mileage is in the Western District.

[8] *Monthly Comment on Transportation Statistics*, Sept. 10, 1945, p. 4.

means that deferred maintenance has accumulated at an accelerated rate. It is estimated that the accumulation of deferred maintenance, including allowance for inadequacy and obsolescence, amounted to 300 million dollars at the end of 1944.[9] This was about 10 per cent of the total maintenance expenses for 1944.

Funds will also be required to finance additions and betterments. What the amounts will be is a debatable matter; we can only be certain that the sums will be large. The most recent estimate by a responsible group that I have seen was made by officials of the 133 Class I line-haul railroads in response to a circular issued by the Interstate Commerce Commission, dated April 24, 1945. This group was requested to furnish estimates or forecasts of their likely capital expenditures for the three years after the end of the war in both Europe and Asia. The total reported for the three years was over 1.6 billion dollars or an average of 544 millions per year.[10] If this investment occurs, and I think it will be made, the railroads will form new capital at approximately the rate that prevailed in the twenties. Because of their strong net liquid asset position, they can undoubtedly finance a considerable portion of this total from their own resources. They will need, however, to resort to the public money markets or to government for the remaining portion of the funds and also for funds to finance investments after the end of the three-year period. I feel certain that the railroads will need to make several hundred million dollars of new investment each year for many years to come.

IV

The immediate outlook for rail credit is generally favorable. While rail net income has been falling since 1943, largely because of rising operating expenses and taxes, it will be high in 1946 as compared with prewar averages. Revenues will probably be about 7.0 billion dollars, or 3.0 billions higher than in 1939, and not far under the 7.5 billions in 1942. Most roads will have large excess profits' tax carrybacks available to overcome any temporary unsatisfactory net earnings. Excess profits' taxes were eliminated as of January 1, 1946, and the combined normal and surtax rates have been cut slightly. I am informed that most of the larger railroads intended to wipe out the unamortized balances for defense projects, aggregating about 485 million dollars at the end of September, 1945, during the last four months of 1945. If carried out, this accelerated amortization puts money in the treasuries of the carriers. Fixed charges in 1946 will be over 100 million dollars below the amount in 1941.

[9] Based on studies made by the Bureau of Valuation, Interstate Commerce Commission. See *58th Annual Report of the Interstate Commerce Commission*, 1944, p. 19.

[10] *Monthly Comment on Transportation Statistics*, Dec. 10, 1945, p. 1.

It is generally believed that reconversion of industry to full peacetime operation will take from two to three years after the end of the war in Japan. During this period, rail net earnings should be reasonably satisfactory, at least as compared with the prewar years. National income is expected to be high, perhaps 120 billions per year. There will undoubtedly be an active building program to overcome accumulated deficits in depression and war years and to improve the quality of housing. A large production of durable consumers goods, such as furniture, refrigerators, automobiles, etc., will also materialize. Heavy exports of food and other products for the relief and rehabilitation of foreign countries are inevitable. All of this activity will create a large volume of traffic, in which the railroads will obtain the lion's share, with due allowance for the revival and expansion of competition by other agencies of transportation.

Perhaps the chief threat to rail credit in the next two or three years is an increase in wages. The rail employees are asking for advances of about 25 per cent which, if granted, would virtually wipe out net income after fixed charges.[11] It is probable, too, that the carriers will be faced with further increases in prices for materials and supplies. In such event, profits will be curtailed.

V

The outlook for rail credit when the economy is producing on a "normal" peacetime basis, say from 1948 onwards, is not too favorable. The railroads will be confronted with the mounting competition of other modes of transportation for both freight and passenger traffic. The water carriers will compete for heavy bulky tonnage, the motor trucks for high-class and short-haul commodities, the automobiles for passengers, the pipe lines for oil and gasoline, and the air carriers for long-haul passengers and valuable products. Rail losses will be greatest in the fields of passenger and high-class freight traffic; in respect to heavy tonnage the railroads will continue indefinitely to be the principal domestic transportation agency, but they will suffer losses to water carriers and pipe lines.

Railroads probably cannot increase their rate level in the long-run, and they may be forced by economic conditions, if not by regulatory orders, to lower their charges. If the competing agencies of transporta-

[11] In July, 1945, the "Big Five" operating brotherhoods presented demands to the railroads for a $2.50 per day increase in base pay, overtime pay, a wage differential for yard conductor-foremen, overtime pay for Sundays and seven stipulated holidays, restrictions on lengths of trains, a proposal to standardize wage rates between territories, and proposals covering uniforms. In September, 1945, the American Federation of Labor railway employees' department, including 15 unions, submitted demands for a 6-hour day and a 36-hour week to replace the present 48-hour week, with no reduction in straight-time weekly pay. Representatives of the railroads and the unions began a series of conferences relative to these demands on November 27 in Chicago.

tion are able to maintain favorable costs and services vis-à-vis the railroads, rail rates will tend to fall. Also, if the economy fails to maintain a high volume of production and income, there will not be enough business to go around, and rates will feel the depressing effects of inadequate traffic.

Rail traffic and revenues depend greatly upon the amount of national income and general economic activity. The correlation, for instance, between revenue ton-miles, revenue passenger-miles, and national income has been found to be close.[12]

It appears that, if "full" employment is attained and if prices do not decline below 1939 levels, the national income will be at least 120 billion dollars per year in 1948 or 1949. Also, if the relationships hold between rail traffic and national income, freight traffic in 1948 would be about 52 per cent above the 1939 level, and passenger traffic would be perhaps 39 per cent higher.[13] Assuming revenues per ton-mile and per passenger-mile are the same in 1948 as in 1939, freight revenues would be about 4.9 billion dollars and passenger revenues about 580 millions in 1948. If revenues from all other sources are about 300 millions per year, as they were in 1939, the total revenues in 1948 would be approximately 5 3/4 billions. However, if national income should be materially less than 120 billion dollars in 1948 or thereafter, rail revenues would be less than 5 3/4 billions. Unless the economy falls into another depression, however, rail revenues will probably be 5 billion dollars or more in the postwar years, which would be at least 25 per cent higher than the 4 billions received in 1939.

Rail operating costs are now higher than in the prewar period and may rise further in the future in response to high prices for labor, materials, and supplies, etc. Wages normally are 45 to 50 per cent of rail operating revenues and 60 to 65 per cent of operating expenses. Wage rates were about 27 per cent higher in 1945 than in 1940.[14] In the past, the railroads have tended to substitute capital goods for labor to offset rising wage rates,[15] but there is a limit to this practice without incurring higher average unit costs. The recent rail union demands for higher wages would, if granted even in part, unquestionably raise costs further.

Rail taxes will also be higher in the future than in prewar years. In 1939, taxes were about 357 million dollars or 12 per cent of operating expenses. The ratio rose to 32.5 per cent in 1943; after January 1, 1946,

[12] Bureau of Transport Economics and Statistics, Interstate Commerce Commission, *Postwar Traffic Levels*, revised edition, Dec., 1944, especially Chs. IV, VII, and VIII.

[13] *Ibid.*, pp. 66, 70.

[14] *Monthly Comment on Transportation Statistics*, Oct. 9, 1945, p. 11. This percentage increase is based upon the average straight-time hourly earnings of employees of Class I railroads.

[15] Very largely for this reason, the railroads were able to handle a greater volume of traffic in World War II than in World War I with 650,000 fewer employees.

it will fall on account of the repeal of the excess profits' tax, adjustments in taxes paid during the war, and lower normal and surtax rates. However, the federal budget will be from two and one-half to three times as large as before the war (about 8 billion dollars in 1939) and state and local expenditures are likely to be as high as they were formerly. Consequently, the government will have to raise at least 12 billions more in taxes than it did before 1941 if the budget is to be balanced and the railroads will have to bear their share of the increased burden.

Another important rail cost item that probably will not fall to prewar levels is fuel.[16] Bituminous coal and fuel oil are both important to the railroads. In 1943, for example, the combined cost of these two items to the Class I railroads was 521 million dollars or 9 per cent of total operating expenses of 5.7 billions. With higher wage rates for the miners granted during the war and further increases in prospect to protect their "take-home pay" coal prices are not likely to decline to prewar levels. Considering the great consumption of oil during the war it seems likely that shrinking reserves of this fuel will block significant price reductions in the future.

The net effect of these higher expenses, after allowance has been made for such efficiencies and economies as the railroads may make in the future, will be to increase rail costs. In technical language, the average unit cost curves of the railroads will tend to be higher in the future than in the prewar period. Marginal costs will also tend to be higher, since the rise in average unit costs has been due largely to increases in wages, fuel prices, and other variable expenses. At optimum output of service units (ton-miles and passenger-miles), average unit costs are at a minimum and also equal to marginal costs. Ideally, the rail plant should be operated at the least-cost point and if demand is sufficiently strong, rates should be set to yield the minimum necessary profits to sustain sound credit in the long run. Very likely many railroads will not be called upon to operate up to the optimum point in the postwar period. Hence their average unit costs will tend to fall and their profits rise as the volume of business increases. If it appears unlikely that certain carriers can ever operate successfully at the optimum scale of output, steps should be taken to reduce total capital values through devaluation and disinvestment.

VI

What will be the long-run cost of new money for the railroads?

Rail long-term interest rates depend partly upon the interest rate for

[16] For instance, the average price of bituminous coal purchased f.o.b. mines by railroads increased 41% from 1940 to 1944. During the same period, fuel oil prices advanced nearly 33%. With the exception of electric current, all other fuels used by railroads advanced at least 20% in price from 1940 to 1944. *Monthly Comment on Transportation Statistics*, Mar. 7, 1945, p. 11.

new money and partly upon the earnings prospects of the industry. Money rates on long-term investments are low and are likely to remain low indefinitely.[17] There are two conditions responsible for this outlook. First, the United States Treasury is vitally interested in low interest rates and can be counted on to use its efforts to keep them there. As Secretary of the Treasury Vinson pointed out at the end of November, the burden of the public debt—265 billion dollars at the end of 1945—would be increased greatly by even a slight rise in money costs. The other main factor in restraining a rise in money rates is the pressure of private lenders seeking investment opportunities. With liquid assets in the country at an all-time high total of more than 225 billion dollars and national income recently at a peak of 160 billions per year, and likely to remain high as compared with prewar levels, the volume of money savings will be very large for some time to come.

Rail long-term money rates, of course, will be higher than those on government bonds—how much higher will depend largely on the quality of rail credit. If government interest rates remain around 2 per cent, it is probable that rates on new rail bonds will average around 4 per cent. The rates on equity capital will have to be higher than rail interest rates if stocks are to be sold to the public.

Will the net earnings in sight be sufficient to attract the needed investment through the regular money markets? The answer is "yes" with respect to the financing of equipment purchases by issue of equipment trust obligations. As for bonds, the stronger carriers can probably sell their obligations at favorable effective rates of interest. The weaker lines may experience difficulties in selling bonds unless earnings are greater than I now anticipate. Probably both strong and weak railroads will not be able to secure any substantial proportion of their new capital through stock sales. Net profits of most companies are not likely to be large enough to tempt any but the most speculative investors.

If rail profits for most carriers are as low in the long-run as I think they will be, the necessary new capital probably cannot be obtained entirely through the regular money markets. The country will then be faced with a dilemma, which is whether to dispense with certain investments and confine outlays to those that private investors stand ready to finance, or whether to call upon government to furnish the capital. Railroads have received public financial aid before—during the period of construction, during and after World War I, and during the depression of the thirties. For example, the Reconstruction Finance Corporation loaned them 537 million dollars from 1932, when the corporation was established, until the end of 1937.[18] The RFC which is still doing

[17] The present computed average interest rate on outstanding federal debt is about 1.9%.

[18] *Report on the Reconstruction Finance Corporation, Fourth Quarter*, 1937, p. 8. Additional government loans to railroads for financing maintenance work and purchases of equipment under provisions of the National Industrial Recovery Act totaled $231,000,000 by 1937.

business, or another government agency, with expanded authority, might make or guarantee loans to railroads for rehabilitation and modernization.[19] Shall we resort to such means? The answer depends upon government and public attitudes toward the railroads. Decisions will probably be made, not in terms solely of comparative economic advantage, but also in terms of that elusive concept called the general welfare. I do not know to what extent "welfare" considerations will be permitted to influence public policy towards rail investment. I think that something along this line will be done, for it appears to me that "weak" roads will be bolstered up by government. The cry that the integrity of rail credit is necessary to the general welfare will probably evoke a sympathetic response on the part of legislators and voters. General welfare, however, does not offer a very concrete criterion for allocating the scarce factors of production.

VII

In the remainder of the paper, I shall discuss some of the more important methods that might be employed to improve rail credit in the future.

One possible means is reduction of debt in order to lessen the burden of fixed charges. In spite of considerable success on the part of the railroads in reducing debt during the war years, further reductions are necessary before an ideal relationship between creditor and equity capitalization is attained. This method will not be popular with stockholders who will have to forego dividends or bondholders who will suffer loss of principal, but it should be used to the greatest possible extent.

A second means of reducing fixed charges is to cut down fixed rates of interest on funded debt. Payments on bonds must be more nearly related to fluctuations in net earnings if rail financial risks are to be lessened. In the past, reliance has been placed chiefly on the income bond to introduce flexibility into the debt structure. But this method has been sharply criticized because the bondholder loses his interest income in any year in which it is not earned. He does not stand to gain by sharing profits with common stockholders when business is booming.

[19] This policy might be implemented in any one of several ways. Its operation might be confined to railroads which were in a position to supply adequate collateral for a loan or it might be applied also to carriers which could not meet any reasonable test for sound credit. In the latter instance, the loans would have to be justified on other than economic grounds, such as national defense or "general welfare." It is even conceivable that the government might set up a corporation empowered to acquire leasehold rights of railroads or of parts of railroads. Presumably the carriers would be operated by lessees who would own rolling stock and equipment, with financing of ways and structures carried on largely if not entirely by government. This program would involve us in the question of government ownership of railroads, which is a bit afield for purposes of the present discussion.

Attempts have been made to overcome this defect—as for example under reorganization plans approved by the Interstate Commerce Commission—by introducing the cumulative feature into the income bond, but this device meets considerable opposition on the part of junior security holders whose values are adversely affected thereby. In order to overcome this difficulty, the period of cumulation is generally limited in Commission plans for reorganization to three to five years.

Such a compromise, however, does not yield a final solution to the problem. As W. H. S. Stevens has written, "The influence of the possibility of any accumulation is damaging to preferred and common stock values and impairs the ability of the corporation to finance with stock. Moreover, it is by no means certain that the limited accumulation provided for by the approved plans is actually as limited as it appears to be."[20] A better means of securing flexibility in the financial structure than the income bond, even with the limited accumulation feature, must be found, if possible.

The participating bond has been suggested for this role.[21] It combines the feature of yielding the bondholder an annual income as earned up to a nominal rate of interest, with participation in excess earnings above income interest at some fixed proportion of such excess earnings to the extent that the nominal rate had not been earned previously. This method has the merit of keeping the fixed charges at a low level, of not threatening the values of equity securities, and hence of reducing the financial risks of carrying on the rail enterprise.

Rail bondholders will probably accept this method of securing flexibility in the debt structure only under the pressure of adverse financial conditions. In reorganizations, it will be possible to insist upon the substitution of contingent interest obligations for fixed interest bonds. Bondholders will frequently have little choice in the matter. Something, too, may be done with the bonds of solvent companies as callable bonds are outstanding or as noncallable bonds mature. In the issue of new debt, rail management should make all possible use of contingent interest obligations as a means of reducing financial risk.

Other methods of reducing fixed charges may also be employed, including earmarking high earnings in prosperous years for purchase and retirement of noncallable high interest rate bonds, in cases where it is not feasible to replace fixed interest obligations with contingent interest bonds; refunding callable and maturing bonds into lower fixed interest bearing bonds; and making all new debt, in the absence of strong and compelling reasons to the contrary, subject to call and conversion. Each

[20] W. H. S. Stevens, *op. cit.*, p. 194.

[21] National Resources Planning Board, *Transportation and National Policy*, pp. 8–9. Stevens favors the use of participating bonds as a means of securing debt elasticity. *Ibid.*, pp. 194–196.

of these means can render assistance in lessening the present high financial risks incurred by railroads.

VIII

Consideration should also be given to reform of the railway system to eliminate its admitted wastes and inefficiencies. The railroads must be prepared to render better service at lower costs if they are to hold their place in the national transportation system. Steps to consider are the elimination of unnecessary duplication of service and expensive interline competition, further unification and consolidation of facilities into a smaller number of operating firms, pruning of uneconomic branch and feeder lines where other modes of transportation are available and can do a better job than the railroads, substitution of motor or other services for rail services on light-density main lines, and curbing of "feather-bedding" practices by which labor obtains payment for services not performed or not worth performing.[22]

Rail traffic and revenues depend in part upon the efficiency and attractiveness of the service offered to patrons. While the rail outlook for passengers and high-class freight traffic is less favorable than for heavy and bulky traffic, it is by no means hopeless. Vigorous and forward-looking measures will assist many railroads in obtaining a sufficient volume of this business to yield them a satisfactory profit. With respect to merchandise, express, and mail shipments, considerable revenue can be developed by provision of modern, lightweight equipment, faster schedules, more frequent and better arranged service, and by lower rates. In the passenger field, too, the railroads should be able to maintain a respectable position by catering to the needs of the traveling public for safe and comfortable service. Air conditioning, reclining chairs, better seat cushions, adequate meals at reasonable prices, courteous service by rail employees, and the like, are much appreciated. Also, establishment of more through service, especially on sleeping cars routed via Chicago, would be generally welcomed. In some instances, the better service may be more costly than present service; in other cases, it may be less costly. Even if the improvements should involve greater cost, at least for a time after the investment is made, added rail income created by the new equipment and service would frequently justify the expenditure.

Rail improvement in the public interest, however, requires more than rationalization along these lines. There is the broader question of general co-ordination of rail services with those of the other modes of transpor-

[22] If it is deemed necessary to retain some of these wastes and inefficiencies in the interest of the general welfare, such as alternative main routes and considerable excess capacity to provide insurance against a war crisis, the costs should be borne by government and not by the patrons of the railroads or the investors.

tation. Railroads alone are not in a position to render a complete service to all users. While there has been some co-ordination between railroads and other carriers, especially water lines, in the matter of joint traffic and facilities, it is by no means complete. Mutual rivalries and suspicions have tended to keep the parties apart; and public fear of the dangers of a transportation monopoly dominated by the railroads has been another obstacle to co-ordination. It would seem that joint arrangements for the movement of traffic by more than one agency could be worked out in a way that would not only safeguard the public interest but also improve the earnings prospects of the carriers concerned.

A different problem of interagency co-ordination, and a more difficult one to solve, is that of seeing to it that each agency serves the traffic for which it is best fitted, or that each type of traffic moves as it should. This country has long been committed to a policy of free choices among products and methods of production on the basis of competition. The businessman or the consumer selects the preferred alternative for his purposes. In regard to transportation, the traditional policy has been called into question, because we are in doubt whether to leave the matter of allocation of traffic among the several modes to free choice, to government, or to great transportation companies. There is also the subsidiary issue, assuming selection of the competitive method, of how government ought to influence the basis of competition.

Choice of method is largely a matter of feasibility in the light of existing conditions. Very likely, there will be general agreement on the proposition that users should have a major voice in the choice of means of transporting their goods and persons. Also, it will be agreed, I think, that government should exercise supervision over the organization and functioning of the transport system. Thus, while users may decide which mode to patronize, they will find the rates and services offered them regulated or otherwise influenced by government.

It is, therefore, important that the services and rates should reflect as accurately as possible the real comparative advantages of the several modes; otherwise, traffic will not be properly allocated between the agencies and users will not furnish the proper guidance to the production of transportation services. Unwise and uneconomic tax and subsidy policies, for example, lead to misdirection of resources even with free user choices because the rates charged are improperly affected by government policy. We are all familiar with the contention that competing modes are favored over railroads at present by government subsidies and other public aids. Whether this charge is true as made is a most controversial matter, and it would require more time than has been allotted to me merely to analyze the issues. The probabilities are that our unco-ordinated promotion of transportation has led to uneconomic

results in some instances. Certainly a problem is posed which must be examined further and any favoritism found to exist will have to be eliminated if users are to make their choices correctly on the basis of rates and services offered to them.

I have referred to the fear on the part of the public that transportation monopolies or large companies dominated by railroads would be harmful to their interests. The question is timely because the current debate over the issue of integration versus competition has received widespread public notice, including discussion in Congress. After a period of doubt and uncertainty as to the position they should take on the matter, the railroads have publicly advocated a policy of integration.[23] Presumably they would like to establish transportation companies in which they would dominate the other modes. The overseas' steamship lines have also expressed themselves in favor of "parital integration" with air lines.

Integration has been vigorously opposed by the motor carriers, the pipe lines, and the air carriers, the latter of which seem to be an object of special interest at this moment by the railroads and the steamships.[24]

Those who favor a policy of integration claim that the efficient movement of traffic by the cheapest possible means requires the establishment of transportation companies to replace existing railroad companies and other carrier organizations. By reason of their, financial resources

[23] In a report entitled *Consolidation of Railroads*, issued in 1945, the subcommittee on consolidations of the Railroad Committee for the Study of Transportation, Association of American Railroads, stated, in connection with the "transportation company" idea, "Aside from the extreme view entertained by some of desiring as much competition as possible, the objections (to the transportation company idea) appear to rest, primarily, upon (1) fear of a railroad 'monopoly' of transportation, and (2) apprehension that railroads, if permitted to acquire vessels, trucks, busses, airplanes, or pipe lines, would not develop such agencies, but, instead, would seek to stifle their use so as to force the public to return to rail service. Whatever may have been done 50 or 100 years ago, under entirely different conditions, there appears to be no substantial basis for a belief that participation by railroads in the operation of other means of transportation would result either in deterring the sound development of such other agencies or in a reduction in desirable competition. If we exclude expressions of rival agencies of transportation, which either do not desire, or cannot afford, to become 'transportation companies,' the preponderance of opinion seems to be that the formation of such companies, under appropriate governmental supervision, will be in the public interest. Apparently there is no substantial public dissatisfaction in this regard with respect to what has already been accomplished by the railroads in utilizing other means of transportation. . . . " See *Traffic World*, July 21, 1945, p. 176.

[24] In an address before the Aviation Section of the New York Board of Trade on Aug. 24, 1945, Mr. Stuart G. Tipton, the Acting President of the Air Transport Association of America, stated the position of his organization as follows: "We of aviation do not fear competition—of the railroads, the trucks, the merchant marine. Our industry is young and it has the self-confidence of youth. What we do fear is the concern for our welfare expressed by and for the railroads. . . . The reason air transport has been developed is because those who managed it were completely sold on that form of transportation and bent every effort to see to it that every one else was. . . . The men charged with aviation development are ever looking to new horizons. . . . They are the antithesis of monopoly." *Traffic World*, Aug. 25, 1945, pp. 509–510. Mr. Tipton also condemned in the same address a proposal which he said had been made by a representative of the Institute of American Shipping for the "partial integration" of aviation with steamship companies.

and long experience, the railroads are said to be the ideal agency to carry forward the integration. There is a ring of plausibility to this contention. A transportation company dominated by rail interests *could*, if it wished, choose the agency or combination of agencies best fitted to render a given service to users.

But *would* it so choose? This question can only be answered in the light of the background and character of the organization which is going to have the power to make the decisions. On the basis of this test, we cannot be hopeful that the railroads would do a satisfactory job of making choices in the public interest. Those who might be inclined to favor integration under rail auspices should recall the history of rail domination and suppression of the water carriers during the latter part of the last century and the early years of this century.

It would appear, therefore, that a large measure of separation of ownership and control of the several modes of transportation should be a major objective of national transportation policy. Each leading agency will undoubtedly continue to have a place in the picture, because each has cost or service advantages over the others for some portion of the traffic. With fair and equitable promotional and regulatory policies in effect, and with proper co-ordination of the various agencies under government supervision, users could be expected to make choices which would insure a proper allocation of traffic between modes and carriers. The railroads, and the other carriers as well, would then tend to occupy their proper niche in the scheme of things, and the element of unnecessary costs due to misapplication of resources would be reduced to a minimum. It can scarcely be doubted that the railroads, in the long run, would thereby develop a sounder basis of credit than is in prospect under present conditions.

IX

To sum up: Maintenance of credit under a system of private ownership and operation of railroads is a matter of importance to investors and public. New capital will be needed in large amounts for an indefinite period of time to improve service and lower costs. A portion of the new money can be supplied by the railroads from their own resources, but a significant amount must be obtained through the regular money markets or from government.

As a result of the war boom, railroads are in much better financial condition than in the thirties. Stock values have risen about 100 per cent and bonds are up more than one-third over 1940 values. The insolvent carriers have shared in the higher earnings. However, rail long-term debt is still 55 per cent of total capitalization and fixed charges of more than 500 million dollars a year represent a high financial risk to the carriers.

For some years, rail earnings should be higher than before the war, but materially less than during hostilities. The chief threat to satisfactory profits is the demand on the part of the rail unions for higher wages. However, the level of national income is expected to remain high for a time, and the railroads should obtain a large share of the traffic which such activity will create. Rail credit will undoubtedly reflect this favorable traffic and income situation.

The long-run outlook for rail credit, unsupported by government loans or other aids, is less promising. Railroads will meet much competition by all the other modes of transportation both for passenger and freight traffic. Rail costs, which have risen sharply during the war, are not likely to fall to prewar levels. While equipment trust obligations will find a ready market, bonds may meet considerable resistance and stocks may find few buyers in the ordinary money markets.

If rail credit is to be kept healthy indefinitely the railroads must find means of further reducing their financial risks. Such means include reduction of debt principal and fixed interest charges; elimination of wastes and inefficiencies; provision of faster and more convenient service to patrons; better co-ordination of rail and other carriers in the handling of joint traffic; and more economical allocation of traffic among the several modes of transportation. Integration of competing agencies into large transportation companies under rail control does not seem to offer a feasible means of credit improvement because it would limit free user choices of service and also probably not lead to desirable improvements in service at lower costs to patrons.

REORGANIZATION OF THE RAILROAD RATE STRUCTURE

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When I was requested to prepare a paper on this topic it was suggested that the paper discuss the recent decision of the Interstate Commerce Commission in the class-rate investigation and any subsequent events that might follow in its wake. My paper will deal, therefore, almost entirely with that decision.

The decision of the Interstate Commerce Commission in *Class-Rate Investigation, 1939*, and the related proceeding heard with it known as *Consolidated Freight Classification*,[1] brought to an end the first stage of the long and bitter sectional controversy over interterritorial freight rates—a problem which grows out of the differences in levels of intraterritorial rates. The battle is not over, however, and there is no certainty that the rates as revised by the Commission will become effective.

An understanding of the Commission's decision and of the controversy which led to it requires a background of factual information about the rate structure as it exists today. Although these facts are well known to many of you, it may be well to review them briefly before discussing the Commission's decision.

The Present Class-Rate Structure

The rate structures of the country have grown up on a regional basis with somewhat different class-rate structures in each of the five major rate territories, known as Eastern or Official Territory, Southern Territory, Western Trunk-Line Territory, Southwestern Territory, and Mountain-Pacific Territory.[2]

Three major freight classifications exist: namely, the Official Classification, applicable in Eastern Territory; Southern Classification, applicable in Southern Territory; and Western Classification, applicable in the rest of the country.[3] Each of these classifications, besides governing class rates within its own territory, has important interterritorial application.

The number of "classes" of freight recognized and the method of

[1] 262 I.C.C. 447.

[2] Maps showing the boundaries of these territories may be found in the report of the Commission in the class-rate case, p. 730; or in the *Board of Investigation and Research Report on Interterritorial Freight Rates*, 78th Cong., 1st sess., House Doc. No. 303, facing page 1. The two maps are constructed on somewhat different bases, which explains the principal differences in the territorial boundaries shown.

[3] Illinois Classification, in which most but not all of the ratings follow Official Classification, applies on intrastate traffic within Illinois, and has very limited interstate application.

designating classes differ in the three classifications; and the relationships of the rates on the various classes to the first-class rates differ to some extent in the several rate territories.

The same article may be classified differently (in percentage of first-class) in two or in all three of the classifications. About 60 per cent of the ratings, however, are uniform in terms of per cent of first-class in all three classifications; about 13 per cent are unlike in any two classifications; and the remaining 27 per cent are alike in two, but not in all three, of the classifications.[4]

The lack of uniformity in the classification ratings is due largely to the fact that classification is not a matter of formulas; the assignment of articles to the various classes for rate-making purposes rests upon judgment after a consideration of many matters. As the Commission pointed out as long ago as 1919, the differences in ratings in the three classifications are in large part "not due to actual or substantial differences in circumstances and conditions, but are the result of mere differences of opinion and the natural inclination of traffic officials to give expression to their respective theories of classification."[5] It might be added that differences in ratings sometimes reflect differences in the economies of the various classification territories, since they reflect the pressures exerted by producing interests for lower rates on the products in which they are interested.

In recent years the number of classification exceptions published by the carriers, providing lower ratings than the regular classifications, has increased in number. Many of the classification exceptions have a territorial application as wide as the regular classification to which they are exceptions. Others have a more limited application. The Board of Investigation and Research study on interterritorial freight rates indicated that in Official Territory 17 per cent of the commodity descriptions in the classification had been modified by exceptions having wide territorial application. In Western Trunk-Line Territory 26 per cent of the commodity descriptions had been thus modified by exceptions to the classification; in Southern Territory, 31 per cent; and in Southwestern Territory, 36 per cent.[6] The effect of these exceptions was to reduce the rates on the articles concerned by more than 20 per cent.[7] The exception ratings apply on the more important articles of commerce not moving on commodity rates; therefore, considerably more traffic moves on the exception ratings than on the regular classification ratings as will be shown below. The extensive use of classification exceptions in recent years indicates, as the Commission has pointed out, that existing classi-

[4] See p. 469 of the Commission's report.
[5] *Consolidated Classification Case*, 54 I.C.C. 1, 9.
[6] 78th Cong., 1st sess., House Doc. No. 303 (1943), p. 47.
[7] *Ibid.*, p. 48.

fications are outmoded and should be revised.[8] The classifications do not serve the purpose for which they were intended.

Even if the traffic moving on classification exceptions is combined with that moving on the regular classification ratings it will be found that only a small proportion of the total railroad traffic is accounted for. By far the greater proportion of the tonnage carried by the railroads moves on commodity rates. Three different types of commodity rates may be distinguished.[9] There are commodity rates which are tied to the class-rate structure, usually by being made a certain per cent of first-class rates, but sometimes of a class other than first. Other commodity rates are built upon some systematic basis not related to the class rates, but constituting a consistent rate structure. These are commonly built on distance scales, or on a group basis. Frequently they are characterized by one or more base rates and a system of differentials. Lastly, there are commodity rates which are more or less sporadic point-to-point rates, built upon no systematic basis, but adjusted to meet the needs of some particular situation. Commodity rates of the first type, that is, those which are tied to the class rates, could easily be fitted into the freight classification if a sufficient number of ratings were provided.

An analysis of the carload traffic of one day which was made by the Commission's staff indicated that 85.2 per cent of the carload traffic moved on commodity rates, 10.7 per cent on exception ratings, and 4.1 per cent on regular classification ratings. Official Territory is the territory having the largest proportion of its carload traffic moving on classification or exception ratings, but even there it was only 23.4 per cent of the total. Less carload traffic moves on classification ratings to a much greater extent than does carload traffic, but in the South exception ratings are found extensively on less-carload traffic.

Within the rate territories the class rates are constructed on distance scales, although some grouping of origins and destinations is permitted, and numerous key-point rates exist which differ somewhat from the rates which would result from a strict application of the distance scales. Other departures from the strict distance scales are permitted, and usually represent competitive adjustments. Within each of the territories a uniform scale of first-class rates is applied over wide areas, but special treatment has been accorded New England, and part of Michigan, in Official Territory, and the Florida peninsula in Southern Territory. Western Trunk-Line Territory has been divided into four zones, with different levels of first-class rates.

The distance scales in each territory have been prescribed by the Interstate Commerce Commission, and with the exception of Mountain-

[8] 262 I.C.C. 447, 504.

[9] We are here following a classification made in the B.I.R. study, *op. cit.*, p. 92.

Pacific Territory, the scales were prescribed as a result of comprehensive investigations of the class-rate structure. These decisions resulted in more uniformity and consistency in the class-rate structures within the respective territories than had previously existed.

The class-rate scales within the various rate territories differ considerably in their levels and in the rate of progression of the rates with distance. A comparison of the average levels of the scales of the first-class rates is beset with many difficulties, and is not wholly satisfactory for several reasons, and no such comparison was attempted by the Commission in the class-rate investigation. The mind, however, naturally seeks some indication of the approximate relationship of the class-rate scales in the different territories in order to understand better the extent of the differences. Several efforts have been made to provide an approximation of the differences in levels.

The Board of Investigation and Research study produced the following approximation of the relationships, with the Official Territory basic scale taken as 100: Official, 100; Southern, 139; Western Trunk-Line Zone I, 128, Zone II, 146, Zone III, 161, Zone IV, 184; Mountain-Pacific, 166.[10]

A very frequent misconception arises from the use of such figures. It is commonly assumed that these relationships measure the relationships of rates on actual commodities. They measure such relationships only when the article in question is rated the same, in per cent of first class, in the different territories. If the classification ratings are different in two territories the difference in the rate levels on that article may be more, or may be less, than indicated by these relatives. If, for instance, an article is rated first class in Official Territory and third class in Southern, the difference in ratings just about offsets the differences in the levels of first-class rates, and the rate levels on the article are approximately the same in both territories.

Differences in the levels of commodity rates in the different territories are usually less than the differences in the levels of first-class rates. On some commodities the levels of commodity rates are the same in two or more territories which have different levels of class rates. Some commodity rates are lower in a territory having high class rates than in a territory having lower class rates. Thus there are several commodities moving on commodity rates on which the rate level is lower in the South than in Eastern Territory.

Differences in class-rate levels in the different territories make difficult the problem of constructing interterritorial rates. Various complicated methods of constructing them have been used. In general the bases for constructing interterritorial class rates have been prescribed by the

[10] *Op. cit.*, p. 20.

Commission. The Commission has sought to avoid abrupt changes in rates at border points, and it has attempted to blend the different intraterritorial rate levels. The results, however, have not been wholly satisfactory. The existence of different classification ratings in two rate territories, furthermore, creates additional difficulties in obtaining a proper relationship between interterritorial rates on a particular commodity and the levels within the origin and destination territories.

Dissatisfaction With Interterritorial Class Rates

Dissatisfaction with the present class-rate structure has been particularly strong in the South but has also been present in the West. Efforts of the South to industrialize in recent years account for the vigor with which the South has pressed its claim for a reform of the class-rate structure.

The most common complaint of the South has been that the higher interterritorial rates from the South to points in Official Territory place Southern manufacturers at a disadvantage in reaching northern markets in competition with producers in Eastern Territory who can ship on a lower scale of rates. The South has claimed that its rate handicaps have been a serious disadvantage to manufacturers in the South, and that they have prevented a normal industrial development of that area. The complaints of the West against the interterritorial rates from the West to points in Official Territory are similar to those of the South. The extent to which the structure of interterritorial rates and the differences in the levels of intraterritorial rates may have actually retarded the industrial development of the West and South cannot, I believe, be determined.

On many articles produced in the South and West the producers have succeeded in obtaining interterritorial rates to Official Territory on the Official Territory level, or on a basis which exceeds the Official Territory level by much less than the differences in the class-rate scales. Some of these adjustments have been brought about by action of the carriers; in other cases they have come about as a result of decisions of the Interstate Commerce Commission.[11] These piecemeal adjustments, although relieving the situation in specific instances, have not removed the basic cause of the difficulties encountered by Southern and Western interests; namely, the differences in the levels of the class rates as a whole in the different territories. If interterritorial rates from the South to the North on the Northern level, or approximately on that level, are justified on some articles of commerce that are produced in substantial quantities in the South, they are justified on articles which are produced in small

[11] For a list of such cases involving rates from the South see pp. 603–604 of the Commission's decision in the class-rate case.

quantities, or which may not now be produced at all in the South.

The relationships between class rates as a whole in the several territories were brought in issue for the first time in the cases which we are discussing. The investigations of the classifications and of the class rates were instituted by the Commission on its own motion in 1939. The decision of the Commission in the combined proceedings was made on May 15, 1945. A supplemental report and decision was made on October 30, 1945. The classification case embraced the three classifications, and hence covers the whole country. The class-rate case, however, did not embrace rates in Mountain-Pacific Territory, or between that territory and the rest of the United States. It is not worth while here to describe the position of the various parties to the proceedings or the arguments urged before the Commission except as they may be incidentally referred to in the analysis of the Commission's decision and comments thereon. We may proceed, therefore, with a summary of the Commission's decision.

The Commission's Decision

In the classification case the Commission found the existing classifications to be unreasonable. It also found that because of the substantial number of differences in ratings the classifications resulted in undue and unreasonable preference and advantage, and in undue and unreasonable prejudice and disadvantage, in violation of Section 3 of the Interstate Commerce Act. The Commission therefore required the establishment of a uniform classification, and gave the carriers ninety days to advise the Commission whether they would undertake to make and tender to the Commission for approval a uniform classification. The carriers have advised the Commission that they will prepare such a classification. The Commission's decision requires that the new classification contain 30 classes, ranging from Class 400 (four times first class) to Class 13 (13 per cent of first class).

So far as the levels of rates are concerned, the Commission found the existing class rates, both intraterritorial and interterritorial, to be unreasonable under Section 1 of the Act. It also found that the relation between the interterritorial rates from Southern, Southwestern, and Western Trunk-Line Territories to Official Territory and the intraterritorial rates within Official Territory caused undue and unreasonable preference and advantage to Official Territory as a whole and to the shippers and receivers of freight therein, and subjected Southern, Southwestern, and Western Trunk-Line Territories, as a whole, and the shippers and receivers of freight therein, to undue and unreasonable prejudice and disadvantage in violation of Section 3 of the Act. A scale of first-class (Class 100) rates was prescribed which is to go into effect

simultaneously with the new uniform classification. The new scale of rates is about 15 per cent higher than the basic Eastern scale of rates as increased by the general rate increases of 1938.

Because a considerable time will elapse before the new classification can be established and put into effect along with the new scale of rates, the Commission prescribed an *ad interim* or temporary revision of the class rates subject to existing classifications. Under the *ad interim* adjustment the rates within Official Territory were to be increased 10 per cent. The rates within Southern, Western Trunk-Line, and Southwestern Territories were to be reduced 10 per cent, and so also were the interterritorial rates between the various territories embraced within the investigation. The reductions, however, were subject to certain minima determined from the application of the same scale of rates as was prescribed for the permanent adjustment. The *ad interim* rates, as noted above, were to be subject to the existing classifications, and hence could be put into effect before the new uniform classification was established. It is important to note, also, that the *ad interim* increases and reductions were to apply only to traffic moving on regular classification ratings, and not to traffic moving on exception ratings, and of course not to traffic moving on commodity rates.

The effective date of the *ad interim* rates was twice postponed, but the rates were finally to become effective on January 1, 1946. Before that date, however, the Commission's order in the class-rate case was temporarily enjoined by a three-judge federal court for the northern district of New York at the request of nine Official Territory states. The injunction applies to the orders of the Commission in the class-rate case, but apparently not to orders in the classification case. It is not known yet, of course, whether the injunction will be made permanent, or, if it is made permanent, whether it will be sustained by the Supreme Court.

Basis of the Decision

The Commission's decision in the combined proceedings rests fundamentally on two grounds: a finding that differences in transportation costs in the various rate territories do not justify existing differences in the levels of rates, and second, that differences in the composition of traffic in the different territories do not require a different distribution of the rate burden, but that on the contrary present differences in the distribution of the transportation burden unduly favor shippers and receivers of freight in areas having low class rates, and place shippers and receivers of freight in higher rated areas at an unwarranted disadvantage.

On the first point the Commission said: " . . . there is no doubt that, based on cost of service considerations, the differences in levels, schemes,

and progressions of scales that at present occur in the several territorial class-rate structures here under review are not justified."[12]

The matter of differences in the composition of traffic as a justification of differences in rates was involved both in the question of uniformity of classification and in the question of the levels of the class-rate scales. In reply to the contention that different classification ratings on the same commodity were justified by differences in the composition of traffic the Commission said that such a contention presupposes that in the determination of reasonable ratings consideration and weight must be given to the volume of movement of the particular commodity. "We believe," said the Commission, "that the assignment to the same article of commerce of a rating which is different . . . throughout one territory from the rating in another, because the article moves in large volume in the one as a whole and in small volume in the other, causes undue preference and prejudice between the shippers in the two territories, as well as between the traffic and between the territories."[13] So far as the levels of class rates were concerned, the Commission found that the method of distribution of the rate burden between types of traffic now observed in Southern, Southwestern, and Western Trunk-Line Territories had resulted in class rates so high that they had prevented the free movement of traffic at the rates in issue.[14] The Commission further observed that this was proved by the fact that numerous lower exception and commodity rates had been established which moved the great preponderance of traffic.[15] The Commission might have added that to justify higher class rates in the South and West on the grounds that there is a difference in the distribution of the transportation burden in the different territories is an attempt to justify a difference in rates on the grounds that it has always existed.

Criticisms of the Commission's Decision

Much of the criticism of the Commission's decision has been based on the belief that the evidence does not justify the Commission's conclusions. These critics believe that the cost study, commonly known as the Edwards cost study, which was relied upon by the Commission is not adequate and may be misleading; they also believe that differences in the composition of traffic require a different distribution of the transportation burden in the different territories; and they believe that injury has not been shown to result from the existing differences in class rates. One is tempted to discuss each of these points, but they will doubtless be argued at length in the present court proceeding contesting the Com-

[12] *Op. cit.*, p. 694.
[13] *Ibid.*, p. 505.
[14] *Ibid.*, p. 696.
[15] *Ibid.*

mission's order, and it does not seem desirable to argue them here.

In addition to those who question the adequacy of the evidence to support the Commission's findings but do not question the Commission's motives, there are some who are inclined to see the decision as a political one rather than as a decision which is based on the merits of the controversy. The dispute over interterritorial rates has lasted so long and has become so involved in politics that, whatever decision the Commission reached, the charge would inevitably be made that it was a political decision. The writer is of the conviction that the basic conclusions of the Commission are warranted; namely, that existing differences in the levels of the class rates are not justified, and that they are unjustly discriminatory in their effects. This does not mean, however, that there may not reasonably be differences of opinion concerning the extent to which differences may properly be removed, and the method of removal.

Closely allied with the contention that the Commission's decision was not based on the merits of the controversy is the charge that the Commission, without any statutory authorization, has indulged in a bit of social and economic planning; namely, that it has decided to help bring about greater industrialization of the South and West. It is charged that the Commission is attempting "to equalize fortune, opportunities, and abilities," which the Supreme Court has said is no part of the Commission's function.[16] It is difficult to see how the removal of rate differences that are not justified by transportation conditions can be so regarded. It would seem rather that refusal to remove such differences in order to protect the industrial *status quo* would constitute social and economic planning in disregard of the factors ordinarily considered in rate cases.

Economic Effects of the Decision

The *ad interim* adjustment, if it goes into effect, will reduce the differences between the class-rate levels in the different rate territories, and lower the interterritorial rates. This would appear to alleviate, in part, the disadvantages to which Southern and Western producers have been subjected. Owing to the fact, however, that the *ad interim* adjustment does not apply to exception rates and commodity rates, some unexpected and peculiar rate relationships may result.

The permanent adjustment, if and when brought about, will provide a common level for class rates in four of the five major rate territories of the country, and will also place interterritorial rates between those territories on the new basis. The result will be to remove entirely the rate-level disadvantages of shippers and receivers of freight in Southern, Southwestern, and Western Trunk-Line Territories, insofar as the traffic

[16] *Interstate Commerce Commission* v. *Diffenbaugh*, 222 U.S. 42.

moves on class rates. Such traffic, however, is such a small part of the total that the results of the decision will not be as great as has sometimes been assumed. In the reclassification of freight incident to the establishment of a new classification, however, it is likely that many of the exception ratings, and perhaps some of the commodity rates now related to the class rates, can be brought into the new classification with its 30 different classes, and uniformity in ratings and rates on such traffic will therefore be brought about. The Commission said, in its decision, that while exceptions to the classifications were not in issue in the classification case it was difficult to understand how a particular rating on a given article (presumably whether determined by the classification or by a classification exception) is justified for application throughout an entire classification territory, but not in an adjoining territory.[17] The door was left open for possible instances in which differences in ratings might be justified, by providing that classification exceptions could still be made "when required either by the provisions of the Interstate Commerce Act or for commercial or competitive reasons."[18] Such differences in ratings, however, are to be "justified individually upon their own merits."[19] The conclusion seems warranted that exception ratings will not be permitted to destroy uniformity of classification generally, but will be confined to really exceptional conditions and circumstances. If this view of the situation is correct, the permanent adjustment would provide uniform rate levels on more traffic than now moves on classification ratings.

Assuming that a uniform classification and single level of class rates is established, an important question will be whether uniformity can be maintained over as extensive an area as is covered by the decision without creating financial difficulties for certain railroads, or for railroads in certain areas. It is possible that differences in transportation costs not revealed by the Edwards cost study, or that changes in unit costs brought about by changes in traffic density in certain areas, or that inadequate carrier revenues brought about by differences in the composition of traffic, will require that certain areas or certain railroads be accorded special treatment. In such a situation increased revenues could be provided where necessary in several different ways. One way would be by a general rate increase, including commodity rates, in such areas. Another way would be by a more selective process; that is, by increasing rates on traffic that could stand increases, and, perhaps, by reducing rates where lower rates might substantially increase traffic. In some instances increased revenues could be obtained through increases in the divisions of joint rates that accrue to needy lines. Which of these methods of dealing with the situation would be most appropriate

[17] *Op. cit.*, p. 505.
[18] *Ibid.*, p. 511.
[19] *Ibid.*

would doubtless depend upon circumstances, but it is extremely unlikely that an intelligent solution of the problem would be to increase the class rates alone if such action meant placing them on a substantially higher level than prevailed elsewhere. We may rest assured, therefore, that even if equality in class-rate levels cannot be maintained there will never be a return to such differences in levels as have prevailed in the past.

Fear has been expressed from time to time that the Commission's decision will result in the establishment of a rigid system of rates based strictly on distance, thus removing a desirable element of flexibility in the rate structure. It does not seem probable that the establishment of a uniform classification and a common level of class rates will destroy justifiable flexibility. Distance scales of class rates have been in use intraterritorially for many years. They have been applied with some flexibility, as is shown by the practice of grouping origins and destinations and of permitting various competitive adjustments. Although a uniform classification is to be set up under the new plan, exception ratings are to be permitted where they can be clearly justified by special circumstances. The Commission, furthermore, has always been lenient in permitting adjustments, through commodity rates and otherwise, to meet carrier and market competition, and it is not likely that this policy is suddenly to be reversed.

Perhaps the biggest question in the public mind concerning the class-rate adjustment is whether, if made effective, it will bring about marked changes in industrial location. Will the South and West become rapidly industrialized? Will Official Territory suffer a loss of industrial establishments, or a loss of markets which she now supplies? The revision of the rate structure will remove one obstacle to the development of industries in the South and West, but it by no means follows that a migration of industries from Official Territory to the South and West will follow, or that the establishment of new industries in the South and West will destroy industries in Official Territory. The East will continue for a long time to be the principal market for many manufactured products, and this circumstance gives an advantage to industries located in the area. For many industries Official Territory has various other locational advantages as well. It is very doubtful if the industrial economy of the East rests on such a flimsy foundation as a lower level of class rates. If there are industries in Official Territory whose location is dependent wholly on a lower level of class rates and which would otherwise be disadvantageously located, the migration of such industries to locations possessing genuine locational advantages would be to the good of the country. It may be of some consolation to Eastern industrialists to know that such fears as have been expressed in Southern and Western Territories about the new rate adjustment are based on the belief that the

new rates will enable Eastern goods to move more readily into the South and West in competition with local industries in those areas. From the point of view of an economist the removal of unwarranted differences in the levels of class rates seems to be in the interest of the country as a whole. By removing unwarranted freight-rate handicaps the establishment of particular industries in the most favorable locations should be facilitated, and a sounder geographical specialization should develop.

Some Further Problems

The establishment of a uniform freight classification and the removal of the existing regional differences in the levels of class rates, as provided in the Commission's decision, represent an important step in the reorganization of the rate structure, but it may not be amiss to point out that some other things besides uniformity of classification and the removal of unwarranted differences in class-rate levels are needed.

In the first place, to establish a uniform rating on a particular commodity where diversity now exists, or to carry present ratings, where uniform, into the new classification is without significance if the ratings are so high as to require classification exception ratings or commodity rates to move the traffic. Ratings should be established in the classification itself which will move the traffic. The Commission had this situation in mind when it said that it would be necessary for the carriers in establishing a uniform classification "to examine the various exceptions upon their merits, and so far as possible to weave them into the going classification."[20]

The motor carriers and others have called attention to another situation which requires examination if a sound railroad rate structure is to be developed. It is claimed that under the new scale of rates the rates on less-than-carload traffic will be below the railroad cost of service. The Commission in the original report said that analysis "unmistakably reveals the fact that less-than-carload traffic generally in all the territories is not bearing its proper share of the costs of transportation—in fact, excluding wartime loading, it is not yielding, on the average, its out-of-pocket costs plus constant expenses solely related to this traffic, plus the cost of collection and delivery, in any territory except possibly in the southern where the margin of difference between revenues and these expenses is slight."[21] In the first supplemental report, the Commission, although refusing to exempt less-carload traffic from the reductions required in the *ad interim* adjustment, remarked that the carriers would be expected to give careful consideration to the rates maintained on less-carload traffic with a view to making readjustments in ratings or rates, as promptly as possible, which would insure that the rates on

[20] *Ibid.*, p. 508.
[21] *Ibid.*, p. 697.

such traffic were on a compensatory level.[22] The issue, if settled correctly, requires a determination of the costs of transporting less-carload traffic, and if the rates are above direct costs but less than fully allocated costs, a determination of the extent to which the less-carload rail rates may be lower than fully allocated costs to meet motor-truck competition. The point raised by the motor carriers is part of the broad question of the proper adjustment of rates of competing modes of transport.

Lastly, it is not unlikely that the rate structures on some commodities that move almost entirely on commodity rates should be revised. This, however, does not require an examination of all the commodity-rate structures. As was pointed out in the Board of Investigation and Research study, many commodities moving on commodity rates are low-grade commodities and move relatively short distances, and on such commodities there is no necessity for national or even regional uniformity. On such commodities, it was pointed out, there may be a closer adjustment of rates to local transportation costs and to local conditions of demand than is practicable with class rates. On other commodities moving on commodity rates, however, regional or even nation-wide uniformity in rate levels may be desirable to the extent that transportation costs warrant it. It is for this reason, and also because of the chaotic condition of some commodity-rate structures, that some of them need examination. In view of the requirements of Section 5 of the Transportation Act of 1940 directing the Commission "to institute an investigation into the rates on manufactured products, agricultural commodities, and raw materials, between points in one classification territory and points in another such territory, and into like rates within any of such territories," it is difficult to see how such investigations can be avoided, if there is any desire on the part of those concerned to have them investigated.

Conclusion

The importance of the Commission's decision in the class-rate investigation should not be minimized. It is an important decision, and we have already noted that the establishment of a uniform freight classification and the removal of unjustified regional differences in the levels of class rates, if accomplished, should facilitate geographical specialization that rests upon a sounder economic basis. But if the decision should not be minimized, neither should its importance be exaggerated; and it should not divert attention from the fact that there are other important rate problems which require attention, particularly the relationship between rates of competing modes of transport—a problem which can be dealt with only to a limited extent in the process of establishing a railroad classification and an appropriate system of railroad class rates.

[22] Mimeographed edition, sheet 24.

THE INTERSTATE COMMERCE COMMISSION, THE DEPARTMENT OF JUSTICE, AND THE SUPREME COURT

By ELMER A. SMITH
Illinois Central System

Justice Holmes said[1] some fifty years ago that for the rational study of the law, the black-letter man might be the man of the present, but that the man of the future is the man of statistics and the master of economics. Time has proved that Holmes was right. The stuff of the law today is economics. While most of the problems discussed in this paper may be cast in a legal mold, they are intrinsically economic problems.

Problems of transportation economics do not lose their importance because they reflect the problems of one segment of our economy. The years of war have shown far more than the years of peace the importance of this segment in our national economy. Problems of transportation economics are today national, not sectional, in their nature. An adequate national system of transportation is a condition to the healthy functioning of our economic life.

I propose to consider, first, the soundness of the position pressed by the Department of Justice, that the Sherman Antitrust Act applies to the rate-making procedures of carriers regulated by the Interstate Commerce Commission, and the resulting conflict between the National Transportation Policy declared by Congress in the Interstate Commerce Act, and the Antitrust Act as the Department applies that Act; second, the attitude of the Supreme Court towards the Commission, and the tendency on the part of some members of the Court to substitute their judgment for that of the Commission on purely administrative questions; and, lastly, the important problems that will confront the Commission in the postwar era in its administration of the Interstate Commerce Act.

The Department relies in support of its position upon the decisions of the Supreme Court[2] almost fifty years ago in the *Trans-Missouri* and the *Joint Traffic Association* cases. The Court there held that agreements among railroads giving rate bureaus the power to fix and maintain rates were in restraint of trade and therefore illegal.

Let us consider the setting within which these two cases were decided, the changes since made in the Interstate Commerce Act, and in rate bureau procedure.

[1] "The Path of the Law," address of January 8, 1897, *Collected Legal Papers*, 167; Vol. X, *Harv. L. Rev.* 457; cf. Mr. Justice Frankfurter, concurring in *Driscoll* v. *Edison Light & Power Co.*, 307 U.S. 104.

[2] *United States* v. *Trans-Missouri Freight Assn.*, 166 U.S. 290, decided Mar. 22, 1897; *United States* v. *Joint Traffic Assn.*, 171 U.S. 705, decided Oct. 24, 1898.

The Interstate Commerce Act was passed on February 4, 1887. Court decisions in the next ten years rendered the Commission impotent to regulate rates.[3] But beginning with 1906, Congress passed amendments to the Act which have made it an effective instrument for the regulation of carriers.[4] The regulation provided for in the Act is all-pervasive. It controls every carrier activity which in any way affects the public interest.

The Transportation Act of 1920 introduced, as the Supreme Court has so many times said,[5] a new policy of interstate commerce legislation. That policy was an affirmative one. It emphasized the aim of establishing an adequate national transportation system. This purpose was confirmed and strengthened in the Declaration of National Transportation Policy found in the Transportation Act of 1940.[6] This declaration has a most important bearing upon the questions we are here considering. This policy is directed "all to the end of developing, coordinating and preserving a national transportation system by water, highway and rail, as well as other means, adequate to meet the needs of the commerce of the United States, of the postal service, and of the national defense."

A study of the 210 pages of the Interstate Commerce Act, its history, and its administration by the Commission over a period of fifty-nine years, will demonstrate that the Act was intended by Congress to provide, and in its actual day-by-day application by the Commission provides, within human limitations, a complete protection of the public interest. No gaps remain in that protection to be filled in by the Department of Justice.

Under the Act the Commission's jurisdiction now includes railroads, sleeping-car, express, and pipe-line companies, common and contract motor and water carriers, and freight forwarders. If a rate exceeds a reasonable maximum rate, the Commission reduces it. If it is less than a reasonable minimum, the Commission increases it. If it is unjustly discriminatory or unduly prejudicial, the Commission removes the discrimination or prejudice. If unlawful rates resulted in damages in the past, the Commission awards damages. If carriers propose to increase or reduce their rates, the Commission has the power to suspend such changes pending a determination of their lawfulness. There is no wrong that carriers can impose upon shippers for which no remedy exists under

[3] *C. N. O. & T. P. Ry. Co.* v. *Inter. Com. Com.*, 162 U.S. 184 (1896); *Inter. Com. Com.* v. *Ala. M. Ry. Co.*, 168 U.S. 144 (1897); *C. N. O. & T. P. Ry. Co.* v. *United States*, 167 U.S. 479 (1897–). *The Maximum Rate Case; Eleventh Annual Report of Inter. Com. Com. for the Year 1897*, p. 51.

[4] Clyde B. Aitchison, "The Evolution of the Interstate Commerce Act, 1897–1937," *George Washington Law Rev.*, Vol. V, Mar., 1937, p. 289 .

[5] *Railroad Commission of Wis.* v. *C. B. & Q. R. R. Co.*, 257 U.S. 563; *New England Divisions Case*, 261 U.S. 184; *Dayton-Goose Creek R. R. Co.* v. *United States*, 263 U.S. 465.

[6] "Declaration of National Transportation Policy," Act of Sept. 18, 1940, 54 Stat. L. 899.

the Interstate Commerce Act. That Act embodies a remedial system, to use the language of the Supreme Court,[7] that is complete and self-contained.

The Department in a brief filed in one of these old antitrust cases said that when Congress saw fit to take the railroads out of the operation of the natural laws of trade, it would do so, and for independent competition would substitute government regulation. This Congress has done in the many changes made in the Act since 1897.

The Department between 1897 and 1944 brought only two cases under the Antitrust Act against the railroads which directly challenged their rate-making procedures. These two cases were dismissed by the Department following action by the Commission.[8] The Department as late as 1940 believed that regulation protected the public interest, for it said[9] in a brief filed in the Supreme Court: "In other words, in the case of the railroads there has been a substitution of governmental regulation for competition as a means of protecting the public."

The Supreme Court, when it came to decide this case, said: "Congress has not, in its regulatory scheme [respecting broadcasting] abandoned the principle of free competition, as it has done in the case of railroads, in respect of which regulation involves the suppression of wasteful practices due to competition, the regulation of rates and charges, and other measures which are unnecessary if free competition is to be permitted."

The rate bureaus condemned as illegal by the Supreme Court in the cases decided in 1897 and 1898 were dissolved. New rate bureaus were, however, immediately organized under revised Articles of Association, which very substantially changed the procedure that had been followed. Railroads withdrew from the bureaus the power to fix rates and to assess fines. The rate-making procedure developed over a period of almost five decades generally provides for conferences among the railroads and shippers respecting rates. The right of each railroad to determine for itself what rates it will establish is recognized and is freely exercised.[10]

It is significant that the Commission in its annual report for 1898—the very year in which the *Joint Traffic* case was decided—and in later reports, referred to these rate bureaus, and said that it was difficult to see how railroads could be operated, with due regard to the interest of

[7] *Terminal Warehouse Co.* v. *Pennsylvania R. R. Co.*, 297 U.S. 500, p. 514.

[8] *Decrees and Judgments in Federal Antitrust Cases*, pp. 243–245, 469. See also *Annual Report of the Attorney General for the Year Ended 1910.*

[9] *Federal Communications Com.* v. *Sanders Brothers Radio Station*, 309 U.S. 470.

[10] The procedure followed by rate bureaus has been described at length in the recent report of the Board of Investigation and Research on Rate-Making and Rate-Publishing Procedures of Carriers, Nov. 29, 1943, House Document No. 363, 78th Cong., 1st sess., and in the hearings before Congressional Committees considering bills to regulate rate bureaus: *Hearings* before Senate Committee on Interstate Commerce, 78th Cong., 1st sess., on S. 942, and before a Subcommittee of the House Committee on Interstate and Foreign Commerce, 79th Cong., 1st sess., on H. R. 2536, and *Report* No. 1212, 79th Cong., 1st. sess., to Accompany H. R. 2536.

the shippers and the railroads, without concerted action of the kind afforded through the bureaus. The Commission in 1944, forty-six years later, again considered the place of rate bureaus in the regulatory scheme and said that there was danger that undue breadth in applying the Antitrust Act would interfere with carrying out the Declaration of the National Transportation Policy against "unfair or destructive competitive practices."[11]

What are the reasons for the rate-bureau procedure that has developed over a period of more than fifty years, and without any challenge by the Department of Justice until 1944? The maintenance of rate bureaus, which provide a medium through which railroads and shippers may consult and confer with one another respecting rates, is imperatively required to aid in the effective administration of the Interstate Commerce Act.

The Act sets up standards of rate making which constitute the heart of the Act. Rates must be reasonable. They must be nondiscriminatory. They must not be unduly prejudicial or preferential. The Department contends that these standards are for the guidance of the Interstate Commerce Commission alone, and that the railroads may not under the Antitrust Act collectively consider whether a proposed rate which may affect all railroads and all shippers in a given region or in several regions is reasonable or discriminatory.

But the standards which control the Commission in determining what are lawful rates are the standards which the carriers themselves, to the best of their ability, must follow when they initiate rates. The initiation of rates by carriers under these standards is an integral part of the rate-making procedure contemplated by the Interstate Commerce Act. The whole process of rate initiation by the carriers and the review of those rates by the Commission is a seamless web, and cannot be separated, the carriers controlled in their initiation by theories of competition enforced by the Department and the Commission testing the rates by different standards—those found in the Act. It is impossible for regulation to have even a semblance of success on any such theory. Regulation does not begin with the Commission. Congress intended it should begin with the carriers when they initiate rates. Otherwise the establishment of rates by carriers would be an invitation to litigation, and a burden upon shippers and the Commission.

The Commission more than two decades ago said that the railroads in the performance of the duty imposed upon them of initiating rates,

[11] The Commission's ***Annual Report for the Year 1945*** repeats what it said in its *Annual Report for 1944* respecting rate bureaus. The Commission some twenty-five years ago at the request of the Senate conducted an investigation of a western rate bureau, found that it serves many useful purposes, promotes economy and efficiency, is of advantage to shippers as well as carriers, and that its operation tends to obviate or remove the discrimination which the law condemns. (***In Re Transcontinental Freight Bureau***, 77 I.C.C. 252.)

must exercise judgment and discretion by a like resort to existing facts, circumstances, and conditions in the first instance, just as the Commission must later do when rates are brought in question before it.[12] The rate bureau procedure now attacked enables the carriers to do this very thing.

The House Committee on Interstate and Foreign Commerce said in its recent report[13] on the bill which would subject rate bureau procedure to the control of the Commission: "It is recognized by all who are familiar with the problems of transportation that the carriers subject to the Interstate Commerce Act cannot satisfactorily meet their duties and the responsibilities thereunder, and the basic purposes of the Act cannot be effectively carried out, unless such carriers are permitted to engage in joint activities to a substantial extent."

The Department has overlooked the fact that the rates of an individual railroad are but an integral part of what is becoming a national rate structure. The Declaration of National Transportation Policy in the Transportation Act of 1940 and the amendments by that Act to Section 3 of the Interstate Commerce Act, dealing with discrimination between territories, show that Congress now intends that the rate structure in this country should be treated from the standpoint of the needs of the nation as a whole and not from the standpoint of the interests of one region or of an individual carrier.

The Commission has recently said that the rate structure of this country is not a loose aggregation of separately established rates but a single entity composed of related rates.[14] It gives emphasis to this point in its recent decision in the *Class-Rate* case.[15] And the House Committee Report to which I have just referred contains this accurate statement of the situation: "The rates which together make up a rate structure necessary to satisfy both the standards prescribed by law and the legitimate requirements of commerce are interrelated and interdependent to an extent not generally appreciated by those who are not called upon to deal with them."

The Commission as long ago as 1903 first announced[16] the principle

[12] *Anadarko Cotton Oil Co.* v. *A. T. & S. F. Ry. Co.*, 20 I.C.C. 43, p. 50. The Commission has recognized in a long line of cases that the carriers are just as much an instrument for the administration of the Act as is the Commission. *Bone Dry Fertilizer Co.* v. *A. & C. L. Ry. Co.* 186 I.C.C. 124, p. 128; see also *Export and Import Rates*, 205 I.C.C. 511, p. 552; *Lake Cargo Coal Cases*, 139 I.C.C. 367, p. 391; *El Paso & S. W. Ry. Co.* v. *Arizona Commission*, 51 Fed. (2d) 573, p. 576; *Lime Rock from Sugar Factory, Utah, to Idaho*, 231 I.C.C. 278, p. 281.

[13] *Report of House Committee on Interstate and Foreign Commerce to Accompany H. R. 2536*, Report No. 1212, 79th Cong., 1st sess. Mr. Commissioner Aitchison, in the course of his statement before the House Committee considering this bill, said: "The carriers should be permitted to do collectively and fearlessly that which the law expressed in the Interstate Commerce Act requires of them, in the large way contemplated by the spirit of the whole Act and in conformity with the national transportation policy."

[14] *Summer & Co.* v. *Erie R. R. Co.*, 262 I.C.C. 43, p. 49.

[15] *Class-Rate Investigation, 1939*, decided May 15, 1945, 262 I.C.C. 447, p. 690.

[16] *Proposed Advances in Freight Rates*, 9 I.C.C. 382.

that in fixing rates, the Commission would have regard not altogether to any one particular railroad but to the entire situation, and would consider the effect of whatever order it might make upon all the railroads. This principle has been written into the Act by an unbroken line of decisions[17] during a period of more than four decades, and Congress has many times amended the Act without changing this interpretation. These decisions, and now the Act itself, emphasize the duty of an individual carrier in proposing rate changes to consider how those changes would compare with the rates of other carriers in the same and in other territories, and particularly with rates and rate relationship fixed by the Commission, how they would affect rate relationships and shippers on other railroads and in other territories, how they would affect the rate structure and consequently the revenues of the carriers as a whole, whether they would strengthen or weaken an adequate system of transportation. These matters cannot be intelligently or fairly determined by a carrier acting in a vacuum.

The Commission in many cases[18] has called upon the railroads to consult and confer among themselves and with shippers with a view to working out a lawful and harmonious rate adjustment. Thus the railroads, when carrying out through collective action the specific requests of the Commission, are charged by another department of the government with a violation of the Antitrust Act.

The Department of Justice, while recognizing that rates should conform to the Interstate Commerce Act, sets up its own standard of rate control, to be effected through the enforcement of the Antitrust Act: that rates shall be competitive. The Department apparently contemplates unrestrained and unbridled competition, something which the Commission has opposed for almost sixty years. It further contends that there is a zone of reasonableness between a reasonable maximum and a reasonable minimum rate, and that within this zone the standard of the Department shall control. But the Declaration of National Transportation Policy is specifically directed, among other things, to the establishment not of competitive charges, but of "*reasonable charges*, without unjust discriminations, undue preferences, or unfair or destructive competitive practices." This policy is to be administered by the Commission, not the Department. There will be times when carriers

[17] *Receivers and Shippers Assn.* v. *C. N. O. & T. P. Ry. Co.*, 18 I.C.C. 440, p. 464; *New England Lumber Rates*, 43 I.C.C. 641, p. 653; *Holmes & Hallowell Co.* v. *G. N. Ry. Co.*, 60 I.C.C. 687, p. 708; *Coke from Southern Points*, 204 I.C.C. 767, p. 773; *General Commodity Rate increases*, 1937, 223 I.C.C. 657, p. 744; *Property Owners' Committee* v. *C. &.O. Ry. Co.*, 237 I.C.C. 549 pp. 577–578.

[18] *Salt from Louisiana Mines to Chicago*, 66 I.C.C. 81, p. 93; *Proportional Rates on Grain and Grain Products*, 74 I.C.C. 341, p. 343; *Sugar Cases of 1922*, 81 I.C.C. 448, p. 472; *Increased Railway Rates, Fares, and Charges*, 248 I.C.C. 545, pp. 562–571; 609; *Consolidated Freight Classification Cases*, 262 I.C.C. 447, p. 511; *New Automobiles in Interstate Commerce*, 259 I.C.C. 475, p. 555.

cannot obtain maximum rates, because of carrier or market competition or other factors. But fundamentally the statutory standard of a reasonable maximum rate, not something less, protects the public interest and the carriers at the same time. If rates exceed reasonable maximum rates, the Commission reduces them, as it has many thousands of times.

Suits have recently been brought by the state of Georgia and by the Department of Justice against the railroads charging them with violations of the Antitrust Act in the maintenance of rate bureaus and in their rate-making procedure.[19] On the other hand, the Interstate Commerce Commission, the state commissions, the shippers of this country, as well as the carriers, take the position that these rate-making procedures should be continued but subjected to full control by the Commission.

A bill recently passed by the House of Representatives and now in the Senate would achieve this result. The House Committee, in reporting out this bill,[20] said in part:

> The situation is one which clearly calls for prompt action by Congress. The problem is one of reconciling and harmonizing two great principles of public policy which have been declared by Congress. One of these principles is embodied in the Antitrust Laws. These laws, which are enforced by the Department of Justice, apply broadly for the purpose of preventing unlawful restraints upon competition in all fields of interstate trade and commerce. The other principle, applicable in the relatively limited field of transportation in interstate commerce by carriers subject to the Interstate Commerce Act, is found in the national transportation policy declared in the Interstate Commerce Act.
>
> It is obvious that confusion and uncertainty are inevitable where these two principles of public policy, administered and enforced by different agencies, are applied in such a way that there is conflict between them.

The carriers cannot serve two masters with widely divergent views respecting the principles that should control the determination of rates.

The statements presented to the House Committee by the Interstate Commerce Commission, the state railroad commissions, chambers of commerce, and shipper organizations, both large and small, scattered throughout the entire country, show that those persons who are most familiar with transportation problems and who have the greatest interest in those problems recognize the very necessary place that rate-bureau procedure occupies in the consideration and initiation of rates, and the protection to the shipping public that such procedure insures. The unanimity of opinion on this point by the shippers of this country who pay the rates gives emphasis to Commissioner Eastman's statement made in 1943 before the Senate Committee on Interstate Commerce:[21]

> If the rate bureaus and the like had, over their long history, been the source of grave abuse which prejudiced seriously the interests of the shippers, you may be sure that long since there

[19] *United States* v. *Association of American Railroads, Et Al.*, U. S. District Court, Lincoln, Nebraska; *State of Georgia* v. *Pennsylvania R. R. Co. Et Al.*, 324 U.S. 439 (original suit).

[20] See Note 13.

[21] See Statement by Mr. Commissioner Eastman before Senate Committee on Interstate Commerce; *Hearings* before the Committee on Interstate Commerce. United States Senate, 78th Cong., 1st sess., on S. 942, p. 831.

would have been an uprising and that this situation would have been made clear to you by a heavy tide of complaints pouring into the Commission and into the Congress of the United States. If there has been or is such a tide, it has somehow escaped my knowledge. I believe this hearing will demonstrate that such complaint as there is has its source not in the shippers of the country, but in the lawyers and economists of the Department of Justice.

What is the reason why, after a lapse of almost fifty years, the Department of Justice now takes the position that the Antitrust Act applies to the rate-making procedures which the railroads have developed for the purpose of complying with the standards laid down in the Interstate Commerce Act?

An examination of the addresses and statements made in the past few years by officers of the Department makes it clear that in the opinion of the Department the Interstate Commerce Act has failed in its high purposes, and that the administration of the Act by the Commission has not protected the public interest.[22] The officers of the Department have used the phrases, "excessive rates" and "discriminatory rates," the implication being that regulation by the Commission has been ineffective and that such regulation has brought about the very violations of law which the Act was intended to prohibit and prevent.

The officers of the Department have sought to leave the impression that the Commission passes upon a trivial percentage of the rates which the shippers pay. But studies made by the railroads show that from 80 to 85 per cent of the tonnage moving in this country moves on rates that are the same or less than those approved by the Commission following extended hearings. The Commission has many times been called upon to consider and fix the level of the rate structure as a whole.[23]

[22] Addresses of Wendell Berge, Assistant Attorney General of the United States, of Aug. 7, 1944, before the Kansas City Advertising and Sales Executive Club, address of Sept. 11, 1944, before Town Hall, Inc., Los Angeles; address of Sept. 17, 1944, at Portland, Oregon; address of Sept. 20, 1944, before the Rotary Club, Seattle, Wash.; address of Sept. 20, 1944, before the Seattle Bar Association; address of Oct. 25, 1944, before the Wisconsin Farmers Union Convention at Chippewa Falls, Wis.; letter to Editor of *New York Times* of Aug. 30, 1944, in reply to an editorial in the *New York Times* of Aug. 25, 1944, regarding the antitrust suit brought at Lincoln, Neb., against the railroads; hearings before Committee on Interstate Commerce, United States Senate, 78th Cong., 1st sess., on S. 942, A Bill to Amend the Interstate Commerce Act to Provide for Agreements Between Common Carriers by Railroad, etc.; *Justice in Transportation*, by Arne C. Wiprud, formerly Special Assistant to the Attorney General. (The writer of this paper reviewed this book in an article entitled, "Rate-Making and the Antitrust Law," in the *Railway Age* of Aug. 4, 1945, reprinted in Vol. XII, *I.C.C. Practitioners' Journal*, p. 1117.)

See particularly Mr. Commissioner Eastman's comments on the attitude of the Department of Justice towards the Commission in the statement that he made before the Senate Committee on Interstate Commerce. *Hearings* before Committee on Interstate Commerce, United States Senate, 78th Cong., 1st sess., on S. 942, pp. 877–878.

[23] *Increased Rates, 1910*, 20 I.C.C. 243; *The Five Per Cent Case*, 32 I.C.C. 325; *The Fifteen Per Cent Case*, 45 I.C.C. 303; *Increased Rates, 1920*, 58 I.C.C. 220; *Reduced Rates, 1922*, 68 I.C.C. 676; *The Fifteen Per Cent Case, 1931*, 178 I.C.C. 539, 179 I.C.C. 215, 191 I.C.C. 361; *General Rate Level Investigation, 1933*, 195 I.C.C. 5; *Emergency Freight Charges, 1935*, 208 I.C.C. 4, 215 I.C.C. 439, 219 I.C.C. 565; *General Commodity Rate Increases, 1937*, 223 I.C.C. 657, 229 I.C.C. 435; *The Fifteen Per Cent Case, 1937–1938*, 226 I.C.C. 41; *Ex Parte No. 148, Increased Railway Rates, Fares, and Charges, 1942*, 248 I.C.C. 545, 255 I.C.C. 357, 256 I.C.C. 502, 258 I.C.C. 455, 259 I.C.C. 159.

And the 307 volumes of the Commission's reports are filled not only with decisions fixing the levels of rates, that is, decisions requiring reductions in rates and fixing maximum reasonable rates, but with decisions requiring the elimination of discrimination and prejudice. All these decisions show the extent to which the rate structure has been subjected to a "continuous administrative supervision."[24]

The Commission is always confronted with the problem of fixing rates which will not only be reasonable from the standpoint of the shippers but at the same time adequate to maintain a national system of transportation.

The Department seems to have overlooked the fact that Congress declared it to be a part of the National Transportation Policy "to encourage fair wages and equitable working conditions."

It will take something more than rates which reflect the kind of competition which the Department hopes to bring about to carry out this particular part of the declaration of policy. Emergency boards appointed by the President under the Railway Labor Act to investigate wage disputes between railroads and their employees have recently pointed out that the railroad wage structure is essentially a national one and that railroad wage issues must be dealt with in national terms.[25] A national wage structure, bearing in mind that out of every dollar of revenue taken in by the railroads from 40 to 45 per cent is paid out immediately in wages, requires a national rate structure, and it requires that each railroad in initiating rates shall give consideration to the effect of proposed changes in rates upon the national rate structure, and the ability of that structure to aid in carrying out the Declaration of National Transportation Policy.

The Department, however, has further evidenced in a most striking way its distrust of the administration of the Act by the Commission. The Department has sought, through the powers it possesses of representing the United States in suits brought to set aside orders of the Commission, to defeat many of these orders in the courts, and to control the administrative discretion of the Commission on the facts in a particular case—a discretion vested by Congress in the Commission and not in the Department.[26] Congress did not, however, appoint the Department of Justice to act as a board of review for orders of the Commission.

We have here a very sharp controversy between an agency of Congress and an agency of the Executive. The agency of Congress, entrusted

[24] *United States* v. *Socony Vacuum Oil Co.*, 310 U.S. 150, p. 221.

[25] *Report of Sept. 25, 1943*, to the President; *Supplemental Report of May 29, 1943*, to President; *Report of Oct. 29, 1938*, to President.

[26] *Associated Transport, Inc., Control and Consolidation*, 38 M.C.C. 137; *McLean Trucking Co.* v. *United States*, 321 U.S. 67; *Inter. Com. Com.* v. *City of Jersey City*, 322 U.S. 503; *American Trucking Assns.* v. *United States*, 56 Fed. Supp. 394; *Inland Waterways Corporation* v. *United States*, Fed. Supp.

with the duty of carrying out the National Transportation Policy and applying the Interstate Commerce Act, is now told by an agency of the Executive that its approach to regulation is wrong, that it has failed in the effective administrat on of the Act, and that the theories of regulation held by the agency of the Executive should control the agency of Congress. Thus underlying this controversy is the question whether the Commission is to continue as an independent tribunal, or whether its construction of the Interstate Commerce Act, and the procedure it has evolved in the administration of that Act, should be subjected to control by the Department of Justice. In this connection it is to be borne in mind that prescribing rates for the future is a quasi-legislative function delegated by Congress to the Commission.

What your distinguished President said many years ago,[27] bears repeating today: "In the face of these large responsibilities, however, it is of crucial importance that the Commission with its administrative independence be . . . maintained. Executive or Legislative interference tends to substitute political power for informed and disinterested judgment."

Whatever may be the opinion of the Department of Justice respecting the reasonableness or the relationship of rates, it is to be borne in mind that neither the Department nor a court can require a reduction or change in a single rate. This fact alone shows that the protection of the public interest in matters affecting rates is found in the administration of the Act by the Commission, and not in the application to a regulated industry of the Antitrust Act.

What would be the result if the Department's views are finally sustained? The Department envisages indiscriminate rate-cutting among the carriers, all leading to general reductions in rates. An examination, however, of the results of operations of the carriers in the last three decades, and of the present level of their costs, will show that the carriers are in no position to engage in such competitive rate cutting as the Department seeks to bring about. A living wage for the carriers must reflect fundamentally their cost of service. It seems more likely, therefore, in view of the interdependency of rates, that with carriers denied the right to confer with other carriers and with shipper groups respecting changes in rates, the existing rates would be "frozen"; that is, only those changes in rates would be made which were required by the Commission's orders.

The Department of Justice, in short, would require the shippers of this country to file complaints with the Commission in order to obtain changes in rates which can now be obtained under the existing rate-bureau procedure.

[27] I. L. Sharfman, "Interstate Commerce Commission," *Encyclopaedia of Social Science*, Vol. 8, p. 229.

As Mr. Commissioner Aitchison recently said:[28]

From the standpoint of administration the problem of the Commission is greatly simplified if the carriers who it regulates are permitted to organize so that they may be dealt with as units, rather than as wholly separated and individual entities. We have been informed by many of the State railroad and utilities commissions that this is also their experience. The process of negotiation between carriers and shippers for rates or for services is greatly simplified if shippers may deal with the carriers collectively. Proper functioning of this process materially aids in the development of fair and equal rate adjustments, and thus lessens the task of the regulating bodies.

It is of the greatest significance that in no other industry has the purchaser of a commodity so much to say regarding its price as the purchaser of transportation service. And the means through which the purchaser expresses his views and ascertains at the same time the views of his competitors respecting changes in freight rates, is the rate bureau. The very reason why the Commission is not called upon to suspend most rate changes is because those changes, worked out through rate-bureau procedure, are satisfactory to shippers.

The fundamental fallacy into which the Department of Justice has fallen is its failure to distinguish between the transportation industry, subject to regulation in the most minute detail, whose rates are regulated and profits controlled through the power that the Commission has to fix rates, and in industry whose prices and profits are subject to no control except that of the market place.

But the Interstate Commerce Commission is not the final arbiter of questions arising under the Interstate Commerce Act. The Commission's decisions are subject to review in the federal courts, with the right of appeal direct to the Supreme Court.

What has been the attitude of the "authoritative faculty of economics," as John R. Commons once called the Supreme Court, toward the Commission's decisions which have come before it for review since the October Term, 1937, when changes were first made in what now might be said to have been the old Court? An examination of the decisions since that term shows that the Court has rendered opinions in ninety-nine cases involving the validity of the Commission's orders. Orders in eighty-six of those cases were sustained. Orders in ten cases were set aside. Orders in three cases were sustained in part and set aside in part.

These figures reflect a respectable showing for any litigant in any court. But like averages, they are apt to be misleading. An examination of the decisions themselves gives a somewhat different picture.

These decisions have in many cases been rendered by a sharply divided Court. In six cases the decision was by a five-to-four vote; in ten cases the decision was by a six-to-three vote. A study of these decisions shows that a minority of the Court, which now and then becomes a

[28] *Hearings* before Subcommittee of Committee on Interstate and Foreign Commerce, House of Representatives, 79th Cong., 1st sess., pursuant to H. R. 2536, p. 14.

majority, has displayed a marked tendency to substitute its judgment for that of the Commission on questions wholly administrative in character, and so to construe the Interstate Commerce Act as to restrict the area within which the Commission may exercise its administrative discretion, and thus impede and embarrass the Commission in its administration of the Act. The minority has largely consisted of the same justices.

There is no time here to review these many decisions. It would prove a fascinating study in administrative law and in economics. Language in recent decisions of lower federal courts setting aside the Commission's orders, when considered along with language in these decisions of the Supreme Court, suggests a possibility that the courts may shear the Commission of its powers and usurp its functions, as the courts did in the first two decades of the Commission's life and as the Commerce Court sought to do during the years of its existence.

Mr. Justice Frankfurter, dissenting from a recent decision setting aside an order of the Commission, said:[29]

> That the Commission is an expert body to which Congress has seen fit to commit the regulation of the intricate relationships between the various means of national transportation is a well-worn phrase which ought not to lose its significance in practice when the actions of the Commission come here for review.

These decisions of the Supreme Court, and the dissents, have not escaped the attention of students of law. Professor Dodd of Harvard Law School, in a recent article dealing with the Supreme Court and labor, said:[30]

> But it is clear that the Board's [the National Labor Relation Board's] string of victories has not been due solely to the Supreme Court's general attitude toward administrative agencies. For a majority of the members of the Court—and particularly Justices Black, Douglas, Murphy, and Rutledge, the Justices who have been the most unwilling to set aside anything which the Labor Board has done—have during these same four terms of court shown considerably less reluctance to reverse the Interstate Commerce Commission, an administrative agency at present somewhat out of favor in so-called liberal circles. There is no reason to doubt that, in the case of the Labor Relations Board, judicial acceptance of the abstract principle of narrowly circumscribing judicial review of administrative action has, with most of the Justices, been reinforced by their generally sympathetic attitude toward the methods and policies of this particular administrative agency.

These decisions of the Supreme Court remind one of what Frankfurter and Landis said some eighteen years ago regarding the review of orders of the Commission by the federal courts:[31]

> But the adjustment of these conflicts, although social and economic in their essentials, lies largely within the control of the judicial power. And so, the manner of its exercise will continue to be of paramount public importance. For the issues reach beyond the specialized grasp of the legal profession, beyond the experience and insight of a single court, however well equipped.

[29] *Eastern Central Assn.* v. *United States*, 321 U.S. 194.

[30] E. Merrick Dodd, "The Supreme Court and Organized Labor, 1941–1945," Vol. LVIII, *Harv. L. Rev.*, p. 1018.

[31] Frankfurter and Landis, *The Business of the Supreme Court*, p. 174.

Let us turn, therefore, from this brief review of the relationship between the Commission and other departments of the government to the substantive problems before the Commission.

What Chief Justice Hughes said sixteen years ago is even more true today:[32]

> I suppose no agency of government has more complicated problems than those which confront the Interstate Commerce Commission, and no intelligent student can fail to realize that the success of this endeavor in a sphere of highest importance is to a very great extent the measure of our capacity for self-government.

The underlying problem confronting the Commission, in the language of the Congressional Declaration of National Transportation Policy, is the administration and enforcement of the Act with a view of carrying out that declaration. This is the duty and responsibility of the Commission and not of the Department of Justice. The Department ought not to make this difficult task more difficult by seeking to impose upon the Commission its theories of carrier regulation and control.

One of the most important problems which the Commission will probably be called upon to consider in the near future, in view of the decreasing volume of traffic and the increased costs confronting all agencies of transportation, is what changes in the rate structure may be necessary to support an adequate system of transportation. Motor carriers and water carriers are urging that their rates must be increased to meet increased costs and that rail rates which move competitive traffic must be increased.

Settlements of railroad wage controversies in 1941 and 1943 resulted in increases in wages which on the basis of the present volume of employment amount to $750,000,000 annually. The volume of traffic has enabled the railroads thus far to meet these increased costs without increasing freight rates over the 1940 level. The railroads are now confronted with demands for increased wages amounting to about $1,300,000,000 annually. No other federal tribunal has such far-reaching responsibilities as the Commission has when it is called upon to determine what increases should be made in our national rate structure to meet increased costs.

The cases which the Commission will have before it in the future involving the rates of competing forms of transportation, as Commissioner Eastman said before this Association in 1939, present issues which are as difficult as any that the Commission has ever had to determine. These cases will be more numerous in the future than in the past. The chief question with which the Commission is confronted in such cases is when and to what extent it should exercise its authority to prescribe minimum reasonable rates. The fixing of a minimum rate can protect

[32] Address of Chief Justice Hughes at First Annual Meeting of Association of Interstate Commerce Commission Practitioners, *Annual Reports of Association*, Vol. I, p. 130.

one carrier from the competition of another, can divert traffic from one carrier to another, and can determine what traffic a carrier may handle. The exercise of the minimum rate power in a given case presents questions of great importance and difficulty. No adequate study of this power has ever been made.

The Commission in its Annual Report for 1945 said:[33]

> Competition between rail, motor-carrier, water and pipe-line transportation . . . will undoubtedly increase in intensity. These various conditions emphasize the responsibility on us in seeing, so far as our own powers permit, that the public interest is promoted and advanced along forward-looking lines and in the light of the national transportation policy declared by Congress in 1940.

This policy is the very antithesis of the policy which the Department of Justice would impose upon the country.

Then there are the problems, new and difficult, of differences in rates between territories. The Commission's recent decision in the *Class-Rate* case[34] is the first of what may be many important cases dealing with these differences. It is a landmark in the Commission's decisions. The Commission was here called upon to apply for the first time the amendments to Section 3 made by the Transportation Act of 1940 prohibiting discrimination between territories. Obviously there can be no uniformity in our class-rate structure if rates are to be based, as the Department of Justice contends they must be based, upon the unfettered and indiscriminate competition or the costs of individual railroads.

Another question that will confront the Commission in many different shapes is what steps it should take to bring about a co-ordination of the several agencies of transportation. The exercise by the Commission of its many powers, particularly the minimum rate power, may play an important part in the eventual co-ordination of the various agencies of transportation.

This country, after long deliberation, embarked almost six decades ago upon a policy of regulation of carrier rates. That policy was adopted after many years of trusting to competition to protect the public interest and the total failure of competition to do so. Indeed, this policy of competition as the protector of the public interest was more recently tried out in the motor carrier and water carrier industries, and again found wanting, as the decisions of the Interstate Commerce and the Maritime Commissions will show. Those who work within the four walls of the transportation industry know that there now exists all the competition that is compatible with the public interest.

Although the Department considers the policy of regulation a failure, Congress obviously adheres to it. It has been confirmed and strengthened by the many amendments made to the Interstate Commerce Act

[33] *Annual Report of Interstate Commerce Commission for Year 1945*, p. 7.
[34] *Class-Rate Investigation*, 1939, decided May 15, 1945, 262 I.C.C. 447.

during six decades. It has been written into our national economy. A recent writer refers[35] to the "ecstatic affection" which the railroads now display for the Commission and the principles of regulation, particularly as contrasted with the attitude of the railroads half a century ago. The railroads make no apology for having accepted regulation as a part and parcel of their day's work. The railroads have accommodated themselves to regulation just as they have accommodated themselves many decades ago to the existence of labor unions. There are some other industries that cannot say as much.

Railroads and shippers must trust regulation—trust it more than they have in the past. There will be differences of opinion, of course, because of the great variety of interests and the conflicts among those interests as to what should be done in a particular case. But, in instances where the interested parties, through rate-bureau procedure, cannot resolve their difficulties, the tribunal established by Congress will hear and decide them. No agency of the Executive Department should be permitted to weaken or control the regulatory process. The only effective protection to the public interest—the only possibility of achieving the purposes of the National Transportation Policy—is through regulation accepted by all parties, shippers and carriers alike, fairly and impartially administered by an independent regulatory body.

[35] Review by Prof. Thurman W. Van Metre of *Justice in Transportation*, by Arne C. Wiprud, *Pol. Sci. Quarterly*, Vol. LX, p. 608.

DISCUSSION

W. H. S. Stevens: With some qualifications, there is relatively little in Dr. Dewey's paper on railway credit with which I would disagree. One of such exceptions relates to the implications of the author's extended side trip or joy ride into or over the fields of such complex and difficult problems as consolidation, co-ordination, integration, and abandonments. Essentially these are relatively long-term economic processes. Some phases of them have been going on for decades and most, if not all, of them involve important questions of public policy as yet unsettled.

Assuming that these are topics appropriate to a discussion of rail credit, it may be agreed that any one of the author's suggestions in these areas would probably affect rail credit. That the effect will be favorable rather than the reverse, however, is not so clear. The data available in support of either position are relatively scanty and economic theory and persuasive argument are no satisfactory substitute for concrete evidence.

Dr. Dewey is apparently in the way of becoming a convert to greater flexibility or elasticity in the capitalization of the railroads as a means of maintaining or improving their credit. At least he concludes that "payments on bonds must be more nearly related to fluctuations in net earnings if rail financial risks are to be lessened." But this approach is to skirt the problem rather than to attack it. The flexibility or elasticity of interest payments, though perhaps the most important, is only one angle of the better adaptation of rail securities to the fluctuating forces of economic change. Such an approach ignores other rigidities of the capitalization either in the debt or equity issues which may likewise impair the ability of the corporation, not merely to avoid receivership or trusteeship, but also to finance itself satisfactorily in both good and bad times.

Speaking generally, though with qualifications indicated below, railway securities have not been very flexible. As a result, the financing of capital requirements has from time to time been either difficult or subsequently burdensome without, in some cases, any possibility of relief short of reorganization. In the brief time allotted me, I shall endeavor to summarize certain important inflexibilities with some passing reference to their implications for railway financing and railway credits.

1. With a qualification for reorganization issues, the overwhelming proportion of rail as well as other bonds have been fixed interest obligations with consequent possible difficulties in meeting interest charges during any considerable period of depressed earnings. As Professor Dewey suggests, the contingent interest obligation in the form of so-called "income bonds" represents the chief attempt at a modification of this situation. Contingent interest provisions in the form of participating contracts have not, with one exception, been used in rail issues though the participating principle has been used in a number of obligations issued by nonrail enterprises.[1] But the only type of participation somewhat cautiously mentioned by the speaker is a participating income obligation. The participating principle scarcely

[1] Graham and Dodd, *Security Analysis* (1934), pp. 621–622.

deserves to be so narrowed. Participating characteristics may be combined with fixed interest features in the same obligation in varying combinations or the total interest may be partly income, partly fixed, and partly participating.[2]

In justification of this limitation of the principal speaker's discussion, it may be pointed out that theoretically, at least, the participating income obligation is perhaps the best form of contract from the standpoint of adjusting the debt and interest structure to ability to pay. There are no fixed interest claims to create financial difficulties because income interest is substituted for the fixed interest. Nor need any cumulative feature be annexed to the income bond with possibly injurious effects on the value of junior securities if accumulations occur. Past deficiencies in interest would be compensated or satisfied out of the participations of subsequent years either fully or to whatever extent the earning capacity of the corporation may warrant.[3]

2. A high proportion of railroad bond issues has been noncallable or callable only for the sinking fund. Out of the 754 rail bond issues of 5 million dollars and over from before 1900 through 1938 for which the information is available 39.52 per cent were specifically noncallable as compared with 3.22 per cent for 744 comparable issues of industrials.[4]

The bearing of this situation on the refunding of rail debt can be better appreciated if it is realized that over 43 per cent of 16.8 billion dollars of rail debt with fixed constant rates of interest (exclusive of equipments) offered from 1900 through 1938 carried rates of from 5 to over 8 per cent.[5]

3. Rail preferred stock issues have likewise been predominantly noncallable or nonredeemable. Unpublished tabulations made by the present speaker of the 1,094 preferred stock issues recorded in New York Stock Exchange listing applications for the fifty-year period 1885–1934 indicate that only about one-third of the rail preferred issues are specifically callable or redeemable as compared with about three-fourths of the industrial preferreds.[6] For reasons connected partly with the noncumulative and participating features of rail preferreds as well as their frequently low initial dividend rates, this lack of flexibility is not as serious as it might otherwise be.

4. Convertible bonds have been advocated as a cheap and easy method of limiting the expansion of debt and interest charges always, of course, assuming that the company is sufficiently prosperous, at least from time to time, to induce substantial conversion. Out of 18.7 billion dollars of par value of rail bonds representing issues of 5 millions and over offered from

[2] In my initial analysis of this subject, "Participating Debt Versus Other Securities in Capital Structure Readjustments" (28 *Georgetown Law Journal* 1021, at p. 1024 ff.) four different applications of the participating principle to obligations were discussed.

[3] *Ibid.*, p. 1038; also W. H. S. Stevens, *Railway Financing, 1890–1940*, Transportation and National Policy, National Resources Planning Board, p. 195.

[4] *Corporate Bond Statistics*, W.P.A. Corporate Bond Project, Vol. II, Table 27.

[5] *Ibid.*, Vol. I, Table 4. If the rail bonds covered by the Bond Project which were offered prior to 1900 are included, the percentage with rates of 5% and up is somewhat higher.

[6] These tabulations were made under a grant-in-aid from the Social Science Research Council. Some of the published studies resulting from this grant are referred to in notes 12 and 13.

before 1900 through 1938 less than 2.3 billions or 12.3 per cent were specifically convertible as compared with 19.2 per cent or 12.5 billions of offerings of industrial issues for the same period.[7]

5. Similarly the proportion of rail preferreds which are convertible appear in terms of issues to have been only about one-half the proportion of industrial preferreds. Again this speaker's unpublished tabulations of preferred issues recorded in New York Stock Exchange listing applications show that less than 11 per cent of the 147 rail issues were convertible as compared with over 21 per cent of the 824 industrials.[8] The relatively greater inflexibility of rail stock in this respect, however, is subject to the qualifications previously noted in connection with noncallable preferred issues.

6. Until the early thirties no par value rail preferred stocks were practically nonexistent and no par value rail commons constituted a relatively insignificant proportion of the total common stock capitalization.[9] The following statement from an application filed by the Southern Railway with the Interstate Commerce Commission some years ago is in point:

> In order to finance its future requirements, applicant hopes when market conditions improve to sell common stock or convertible bonds, looking to ultimate reduction in fixed interest bearing debt. It is believed that common stock without par value is a more flexible medium for such financing than stock having a fixed par value, and that the conversion of the present common stock into a like number of shares without par value will facilitate such future financing.[10]

In certain respects, however, the stock capitalization structure of the railways has been somewhat more elastic than that of the industrials. Historically, a very high proportion of railway preferred stock financing has been done through noncumulative stock.[11] To the extent that this is true there has never been any burden of accumulated dividends to contend with in connection with junior stock financing.

Also from 1885 to 1934 the railways appear to have made much greater use of participating preferred stocks in terms of the number of issues than have the industrials.[12]

[7] *Corporate Bond Statistics*, *op. cit.*, Vol. II, Table 31.

[8] See note 6 and accompanying text.

[9] On Dec. 31, 1929, the total outstanding rail common stock was approximately $7.97 billion, of which about $329.5 million, or 4.13% was represented by 3.36 million shares of no par stock. The preferred stock capitalization of $2 billion-odd did not show any no par stock. There were, however, in addition, some no par common shares for which no consideration was received. (Statement 17, *Statistics of Railways in the United States*, p. xxxvii.)

[10] Application of Southern Ry. Co. for authority to issue and dispose of no par common stock, I.C.C. Finance Docket No. 11893, p. 4.

[11] In the absence of other data, some idea of the situation is obtainable from the figures of dividend paying preferred stock. Prior to 1942 the largest amounts of dividend paying preferred stock, both cumulative and noncumulative, were recorded in 1930. In that year the $971 million of dividend paying noncumulatives represented not quite two-thirds of the total dividend paying preferreds though the number of cumulative issues involved was slightly higher than the noncumulatives. (W. H. S. Stevens and E. S. Hobbs, *Analysis of Steam Railway Dividends, 1890–1941*, Bureau of Transport Economics and Statistics, I.C.C., p. 79 and Appendix Table J, p. 98.)

[12] From 1885 to 1934 the New York Stock Exchange listing applications indicate that in excess of 20% of the railway preferred issues were entitled to some participation in profits in excess of their fixed initial dividends as compared with less than 10% of the industrials. (W. H. S. Stevens, "Stockholders Participations in Profits," Table II, 9 *Journal of Business* 211 [1936].)

Finally, so far as I have been able to ascertain, the railways pioneered the earned cumulative preferred stock.[13] This type of issue is perhaps the best form of preferred stock contract yet developed from the standpoint not only of adapting preferred dividend requirements to a fluctuating net income but also of safeguarding the interests of the preferred stockholders as fully as is warranted by the earning power of the company.

Insofar as it is agreed that greater flexibility of the securities in the capital structure will improve railway credit, the progress made in the last fifteen years or so or in immediate prospect is rather extraordinary even though much of it is attributable to rail reorganizations. However, from the rail credit point of view the elimination or reduction of inflexibility is more important than the manner of its accomplishment. It may be agreed that to bring a road out of bankruptcy with a sound capital structure does not assure the future soundness of that structure.[14] But the removal of inelasticities in the securities of a reorganized company may at least be regarded as a step in the right direction.

Under the twenty reorganization plans involving twenty-one roads as of the date of October 31, 1940, practically all of the new second mortgage debt, as well as one small first mortgage issue, was represented by income bonds. Another and large first mortgage issue carried a combination of fixed and contingent (income) interest payments. Practically all of the first mortgage debt is made callable and over 80 per cent of the second mortgage income debt is convertible. Although a bare majority of the nineteen reorganization issues of preferred as of October 30, 1940, were of the earned cumulative variety, these ten issues accounted for over 73 per cent of the approximately 7.4 million new preferred shares. Finally, about 35 per cent of these new preferred shares were entitled to some additional participation in excess of fixed initial dividends.[15]

Nor is this all. Since 1929 there has been a radical shift in stock capitalization away from par and into no par issues, which is only partially the result of the reorganization plans. As of December 31, 1944, the total consideration for no par shares aggregated $2,133,042,077 or 22.15 per cent of the stock capitalization of all railroads as compared with $329,513,548 or 3.29 per cent of the total stock capitalization in 1929.[16]

The first year for which the official figures show a separation between fixed and contingent interest is 1935. In that year the fixed interest charges on the funded debt of Class I roads were 464 million dollars in round numbers and the contingent interest charges about 12 millions. By the end of 1944 the annual fixed interest charges of these roads had decreased by nearly

[13] For detailed discussion and analysis of this type of security, see W. H. S. Stevens, "Rights of Non-Cumulative Preferred Stockholders," 34 *Columbia Law Review* 1439 (1934) and "Discretion of Directors in the Distribution of Non-Cumulative Preferred Dividends," 24 *Georgetown Law Journal* 371 (1936) and cases cited.

[14] Cf. Commissioner Eastman, 233 I.C.C. 409, 437.

[15] W. H. S. Stevens, "Railroad Reorganizations under the Bankruptcy Act," 15 *Journal of Business* (1942) 207–8, 368–9, 373–4.

[16] For source of 1929 figures, see Statement 16A, *Statistics of Railways in the United States, 1929*, and footnotes. The 1944 figures are from I.C.C. *Statistics of Railways in the United States, 1944*, public but not printed.

15 per cent and contingent interest charges had increased by over 115 per cent. Between the end of 1944 and the end of 1945 proposed refunding operations of various roads will, if approved, produce a reduction of nearly 16 million dollars more in interest charges. Also at the end of 1944 there were 25 Class I roads for which reorganization plans were not yet effective, including several large properties. The total debt of these twenty-five roads, both unmatured and in default, aggregated over 2.4 billion dollars.[17] There will be very substantial further reductions in fixed interest and increases in contingent interest charges when these properties have been turned back to their new owners.

Harold D. Koontz: In his interesting paper, Dr. Dewey expresses enthusiasm for the present financial condition of the railroads, encouragement with respect to their immediate postwar financial health, and discouragement as to the probable long-range outlook. His paper illustrates how the problem of maintenance of railroad credit is in reality "the transportation problem." As such, I can find little to criticize in Dr. Dewey's basic analysis and his major conclusions. There are, of course, a number of minor points with which I disagree. For example, I doubt that deferred maintenance has "accumulated at an accelerated rate" on road facilities, although it doubtless has on equipment. He also overlooks increased productivity per manhour due to better labor, the forty-hour week, and other improvements. I doubt further that the transportation business is so static that substitution of capital for labor will soon be limited, as Dr. Dewey states, by a rise in average unit costs.

The tremendous wartime traffic has served to emphasize the prewar existence of a surplus of transportation capacity, and the lower average unit cost which accompanies operations at high load factors and utilization of equipment. The striking economy of utilizing transportation capacity has been nowhere more evident than in the airline business. Wartime load factors of 90–95 per cent, contrasted with peacetime load factors of 50–60 per cent, turned operating losses of many airlines into profits and made expedient—in part because of the excess profit tax statute—material rate reductions. These rate reductions, as well as the rapid development of aircraft design, have made prewar airline equipment and methods of doing business economically obsolete. With the return of peacetime load factors, no domestic airline would be able to cover its total operating expenses without subsidy with prewar equipment and operating methods.

Load factor is likewise extremely important to the railroads. Empty car mileage, underloaded cars, and poor utilization of equipment accounted for prewar railroad freight load factors, for the equipment operated, probably no higher than 30 per cent. Passenger load factors were even lower. While wartime load factors in railroad service could not practically reach those experienced by the airlines, they certainly were double or more peacetime experience, and profits mounted as a result. Although railroad rates were

[17] *Steam Railways in the Hands of Receivers and Trustees*, etc., Dec. 31, 1944, Statement 4524 I.C.C., Bureau of Transport Economics and Statistics.

not reduced during the war as were airline rates, it is doubtful that the railroads, any more than the airlines, can operate profitably at peacetime load factors unless some means is found to increase efficiency or to improve on the prewar utilization of capacity.

The depression after 1929 and the wartime rail traffic load also emphasize the fact that the railroad business, or for that matter, the airline, truck, or water carrier business, is economically no different from other industrial undertakings. There has been a tendency to apply the public utility concept, with its connotation of stability and monopoly, to the railroad business. There is, of course, no convincing reason to expect that the railroad business is or should be materially less subject to business fluctuations than most of our basic manufacturing or extractive industries. So long as railroads and the other types of nonlocal common carriers are competitive and are subject to the variations of business, we can expect marked variations in traffic and load factor and in their ability to carry earnings down into net.

To be sure, the railroad business, by virtue of the variety of the things carried, has a certain element of diversification in its economic character. But this does not mean that the railroads can carry a capitalization made up of 55 per cent in debt without considerable long-term risks. The airlines have, I believe, taken a lesson from the financing practices which accompanied expansion of the railroads. Assisted by a sound depreciation policy, sinking fund provisions for the retirement of debt, and liberal equity financing, the airlines should be able to expand their assets without mortgaging a dangerously high portion of their future earnings. It would be well if these policies were more widely adopted by the railroads.

As Dr. Dewey intimates, even though the national economy stabilizes for the next few years at 120 billion "1945-dollars," and even though the railroads get their proportionate share of the traffic so generated, net income will tend to shrink due to the rising costs and the difficulty of setting and collecting substantially higher freight or passenger rates than those now in effect. Dr. Dewey's conclusions seem to be sound, although I should not be concerned, as he is, that national income will be maintained at the 120 billion dollar level for the next four to five years and more concerned that the railroads will be able to hold the proportionate share of total traffic they had in 1939. While motor carriers may not be a serious threat for perhaps two years and while the railroad passenger business may hold a level slightly above 1939, it is reasonable to expect that the railroad share of total nonlocal common carrier traffic, at least as measured in revenues, will fall as water, highway, and air carriers expand their business.

Consequently, while future railroad revenues will doubtless be well above those in 1939, they may not compensate for rising costs caused both by increases in the price of labor and materials and by the lower peacetime utilization of capacity. The railroads in general, and of course the stronger railroad systems, should be able to cover their fixed charges for the immediate postwar period. But, except for the strongest carriers, any serious decline in the postwar reconstruction level of business activity will surely find the railroads unable to support their heavy debt structures.

Dr. Dewey recognizes the pessimistic long-range outlook for railroad credit and searches for answers. He suggests reduction of fixed charges through lowering debt and cutting down fixed rates of interest. He asks that consideration be given to elimination of wastes and inefficiencies, particularly those to be eliminated through unification, co-ordination, substitution of services, and abandonment. He asks that "feather-bedding" be curbed. He suggests that rate regulation reflect real comparative advantage and that uneconomic government promotion of competing carriers be abandoned. These suggestions are generally sound and constructive. But, in the light of recent history, their mere recital gives rise to a feeling of hopelessness when applied to a given railroad company or system.

Nevertheless, within Dr. Dewey's broad framework of constructive suggestions, there are steps which can be taken. Some railroad debt could be retired and replaced with equity securities; and much of the new money needed for the modernization of the railroad plant could be obtained by equity financing, if railroad managements would take advantage of the present market and would be willing to depart from their customary thinking of debt as the only means for railroad financing. To be sure, railroad shares, as measured by the Dow-Jones average, are far below the average of industrial stocks. But this does not mean that common and preferred stock financing cannot be done, particularly if obsolete concepts of par value and fair prices of securities are reconsidered. Many railroads missed this opportunity in the twenties and most appear to be missing it now. Despite the long-run outlook for railroad credit and the avowed difficulties of selling equity securities, the present market affords a possibility which is certainly worth considering.

Debt reduction should also be approached more aggressively through establishment of adequate depreciation reserve accounting, particularly on road and structures. It is interesting in this connection that the Interstate Commerce Commission has tried for twenty years to change railroad accounting practices to require more adequate depreciation on way and structures and, had railroad managements accepted the Commission's recommendations, millions of dollars paid in taxes during the last five years could have been reserved for bolstering railroad finances.

Wastes and inefficiencies can be reduced. But it seems hopeless, without the compelling force of depression or of the government, to look for savings from unification or co-ordination between carriers, which tedious negotiations and lack of interest on the part of jealous managements make difficult of realization. Instead, the railroads, as indeed the airlines, must look for increased efficiency through rationalization of their own plant and their methods of doing and getting business.

The war period was, of course, the ideal time for making many improvements in efficiency, since labor shortages removed the principal source of opposition to improved equipment, methods, and procedures. But most railroad organizations were not prepared adequately to undertake this kind of industrial engineering. Materials priorities thwarted the purchase of certain efficient equipment, although the priorities system did not deal too

harshly with the railroads as the large expenditures for road improvements and equipment maintenance attest.

Time still remains for improvements in efficiency—even beyond those now planned—if individual managements will aggressively attack the problem. A real planning and industrial engineering job could greatly improve the financial outlook for the railroads, particularly if extended beyond the introduction of laborsaving devices and efficient operating equipment to such matters as improved loading of cars, elimination of unnecessary car handling, withdrawal from unprofitable branch services, improvement of personnel methods, and revision of sales and service concepts of doing business.

Perhaps it is time to look beyond traditional cure-alls such as higher rates, less government interference and promotion, financial reorganization, and fruitless pleas for co-ordination. Perhaps the inevitability of a competitive transportation industry should be recognized and management should look toward better utilization of an efficiently organized and equipped transportation plant to furnish the income for support of railroad credit.

EDWIN H. BURGESS: Recent events in American transportation emphasize the extent to which nationalism is supplanting provincialism in dealing with its problems. Having grown to maturity in groups along with the more or less separately identified social and economic development of the eastern, the southern, and the western regions of the country, the railroads in these three regions nevertheless have been subject, particularly since 1940, to the expressed policy[1] of Congress that they become and remain, in the service they render, a part of a great co-ordinated national transportation system.

The latest step in this growing nationalization of the country's railroads is the Interstate Commerce Commission's recent class-rate decision,[2] in which that tribunal has undertaken, for the whole country, what Professor Locklin aptly calls a "Reorganization of the Railroad Rate Structure." If this decision survives the pending suit to enjoin its enforcement and becomes effective, uniform classification ratings will be mandatory throughout the nation and a uniform scale of class rates will be required in all the territory east of the Rocky Mountains.

Professor Locklin has well and usefully epitomized the complex content of the volume of 319 pages which constitutes this landmark decision. Those not associated with the long trial of the case or otherwise familiar with the ponderous record of testimony, exhibits, briefs, and oral arguments before the Commission can nevertheless gain from Professor Locklin's instructive paper a reliable understanding of the substance of the complicated issues involved, the reasons for the decision, and, in addition, derive the benefit of the author's valuable and recognized opinion as to the decision's soundness.

A decision of the broad territorial and economic scope of this one cannot easily be appraised in disregard of personal views of what is or is not socially,

[1] Transportation Act of 1940, 54 Stat. L. 899.

[2] *Class-Rate Investigation, 1939*, Consolidated Freight Classification, 262 I.C.C. 447.

politically, or economically desirable. It is difficult to judge the validity of the decision solely from the standpoint of the Commission's limited jurisdiction, which excludes legislating or planning for the social and economic welfare of the country and is carefully confined to the regulation of rates in accordance with the statute's specified standards.

The legal basis upon which the Commission rests the decision, although referred to by Professor Locklin, might profitably, I think, be further amplified. It stems from the 1940 amendment of the Act to Regulate Commerce, which, for the first time, specifically prohibited unjust discrimination and undue prejuduce between, among other entities, "regions, districts, or territories,"[3] and also from the concept that the class-rate structures in the East, the West, and the South are a single entity composed of interrelated but widely variant rates.[4] From these premises there was derived the controlling principle that all differences in the class rates of the three territories resulting from the different ways in which the general rate burden therein is distributed between classes and commodities and from other causes, which are not justifiable under recognized standards of rate making, are unlawful and should be corrected.[5]

With this principle established, the legality of the territorial class-rate differences turned on whether the rate-making standards of cost of service, competition, and composition of traffic justified the differences. The Commission upon review of the voluminous evidence on these points held they did not, thereby leaving the existing differences unreasonable and unjustly discriminatory under the principle stated.[6]

The importance of this decision can easily be misjudged. While it is true that the Commission has undertaken specifically to reorganize only that part of the railroad rate structure which consists of class rates, as distinguished from the vastly more extensive and important part consisting of exception rates and commodity rates,[7] and while it is also true that the evidence before the Commission showed that only slightly more than 4 per cent of the total carload traffic of the country moves under class rates,[8] it is not safe to assume that the relative importance of the decision is measurable by so low a percentage figure. Instead, its scope and importance may not be reliably appraised until there are taken into account its effects which are indirect or collateral. Professor Locklin correctly states that the importance of the decision should not be minimized, but in the end, I fear, he does not accord it its full importance.

Rates governed by exceptions to the classification and column rates, it is true, were not directly in issue in the case, but the Commission nevertheless was well aware,[9] as is every informed railroad and industrial traffic officer, that a substantial change in the class rates cannot be made in a vacuum and without affecting those broader fields or segments of the freight rate struc-

[3] *Ibid.*, p. 688.
[4] *Ibid.*, p. 692.
[5] *Ibid.*, p. 692.
[6] *Ibid.*, pp. 504, 694, 696.
[7] *Ibid.*, pp. 454, 562.
[8] *Ibid.*, pp. 564, 695.
[9] *Ibid.*, p. 570.

ture now covered by exception rates, column rates, and to some extent commodity rates. And, when the extent of the fields of these rates is remembered, it becomes apparent how potentially far-reaching the indirect and collateral effects of the decision may be.

The importance of the decision is further emphasized when it is borne in mind that the movement of carload traffic under existing class rates, as the Commission points out, has been reduced to as little as 4.1 per cent of the total because of the unsuitability of the present class rates to the needs of commerce, with the resulting necessity for an ever increasing use in recent years of exception ratings.[10] The new uniform classification which the Commission has found to be necessary under the requirements of the Act and which it has called upon the carriers to formulate, is definitely intended to move a vastly wider field of commodities than ever heretofore moved under the ratings of the Consolidated Classification. Its emphasized aim is to provide ratings that will actually move a substantial volume of traffic, and to that end it contemplates thirty classes more responsive than ever before to the needs of commerce and the incorporation, to the fullest extent possible, of the existing exception ratings and the heavy traffic those ratings now move.[11] Inclusion of the exception traffic alone would more than double the movement under the new classification, for, in number of carloads, it is over two and a half times the volume of the present class-rate traffic.[12]

The attainment of these objectives of the decision must necessarily mean that the portion of the traffic of the nation's railroads which would hereafter be subject to the new class rates would be far in excess of the dwindling 4 per cent to which class rates now apply. The decision therefore is not only a precedent setting one from the standpoint of the uniformity it imposes, but is of outstanding consequence because of the very substantial segment of railroad traffic and revenue it will directly and indirectly affect.

ROBERT W. HARBESON: Professor Locklin has presented a very able and comprehensive analysis of the class-rate decision and its probable consequences. In view of pending litigation in this proceeding it is not possible for me to present the comments which I had prepared dealing with some important questions of theory and policy presented by the decision, but a few observations on matters not touched upon by Professor Locklin may be in order.

The class-rate decision may be better understood, perhaps, in the light of a brief review of certain developments preceding and following the initiation of proceedings in this case. As recently as the Southern Class-Rate Investigation of 1925, which resulted in a comprehensive revision of the class-rate structure within Southern Territory, there was comparatively little complaint about interterritorial rates. Nine years later, however, in 1934, the late Commissioner Eastman in his first report as Federal Co-ordinator of Transportation commented as follows:

[10] *Ibid.*, p. 695.
[11] *Ibid.*, pp. 508, 698.
[12] *Ibid.*, pp. 564, 695.

An objectionable phase of the railroad situation for many years has been the maintenance of regional differences and distinctions, which are very imperfectly related to differences in costs and of territorial boundary lines ("Chinese walls") where rate systems and practices change. It has tended to provincialize the railroads and discourage national unity of action. It has been a prolific source of complaints to the Commission. Regional competition in rates and service has been as keen as the direct competition of parallel lines, and has had equally undesirable and uneven results.[1]

The foregoing line of thought was elaborated in three published studies issued in 1937, 1939, and 1943, respectively, by the research department of the Tennessee Valley Authority in connection with its program for promoting the economic development of the area in which it operates.

There also appeared in 1943 an exhaustive study of interterritorial freight rates made under the direction of Professor Locklin for the former Board of Investigation and Research created by the Transportation Act of 1940. The report of the research staff in this study concluded that regional differences in freight rates were greater than could be justified by transportation costs and conditions, but that the available data did not permit a quantitative determination of the extent to which this was so. The research staff was of the opinion that a uniform classification should be established, with provision for exceptions where differences were clearly justified, and that the levels of class rates should be made as nearly uniform throughout the United States as was consistent with differences in transportation costs and the revenue needs of the carriers. It was also of the opinion that a Congressional declaration of policy along these lines would be appropriate, but that the extent to which uniformity was justified and the methods by which it should be attained were matters which should be determined by the Interstate Commerce Commission.

A majority of the members of the Board of Investigation and Research took a more unqualified position than did the research staff in favor of a uniform class-rate scale. The majority of the Board recommended that Congress direct the Commission to prescribe within three years a uniform classification and uniform scale of class rates throughout the United States, "with only such exceptions as in particular instances may be shown to be necessary to correct inequitable conditions, or provide adequate transportation service in particular areas, or adequate revenues for particular railroads."[2]

Meanwhile the Interstate Commerce Commission in various proceedings, notably the so-called "Southern Governors' Case" of 1939,[3] reduced rates on a number of commodities moving from Southern to Official Territory to the level prevailing in the latter territory. Furthermore, a number of bills were introduced in Congress in 1939 designed to bring about readjustments in territorial and interterritorial rates.[4] None of these bills became law, but two provisions of the Transportation Act of 1940 facilitated the

[1] *First Annual Report of Federal Co-ordinator of Transportation*, Senate Doc. No. 119, 73rd Cong., 2nd sess., 1934, p. 29.

[2] Board of Investigation and Research, *Report on Interterritorial Freight Rates*, House Doc. 303, 78th Cong., 1st sess., p. 337.

[3] *Class-Rate Investigation, 1939*, 262 I.C.C. 447 (1939), at p. 504.

[4] *Ibid.*, p. 688.

reorganization of the rate structure. One provision amended Section 3 of the Interstate Commerce Act to extend the prohibition against undue preference and prejudice to include regions, districts, and territories. The other provision, Section 5 (b) of the Transportation Act of 1940, directed the Commission to investigate the rates on manufactured products, agricultural commodities, and raw materials within and between the classification territories to determine whether such rates were unreasonable or otherwise unlawful, and to enter such orders as were appropriate to remove any unlawfulness found to exist. The investigation leading to the class-rate decision is considered as being a proceeding under this special legislation.

The foregoing comments suggest the growth and development of the view that a more or less comprehensive reorganization of the railway rate structure would be desirable. It is argued that there are various anomalies and inequities in the rate structure resulting from its piecemeal, unco-ordinated and, for a long time, unregulated development, and from the strong but very uneven operation of the forces of carrier and market competition.

Several alternative methods of reorganizing the territorial and interterritorial rate structures have been suggested. One method is that of piecemeal adjustment in individual complaints. This approach has been criticized on the ground that individual proceedings are ordinarily limited in scope and therefore tend to lose sight of fundamental issues and broad objectives in the control of the rate structure, and also that it handicaps small shippers who lack bargaining power in negotiations with carriers and who at the same time find it difficult to finance complaints to protect their interests.

Another suggestion is the so-called "destination-level" theory of rate making, according to which interterritorial rates would be established on a basis which would not exceed, distance considered, the level of rates in effect in the destination territory. This method of rate making is regarded as justifiable in individual instances on the basis of value-of-service considerations. It is criticized, however, on the ground that, if generally applied, it would operate as a bounty on shipments from high-rate to low-rate territories and as a sort of protective tariff against shipments from low-rate to high-rate territories.

The method of reorganizing the rate structure adopted in the recent class-rate and classification decision, namely, a uniform classification throughout the United States and a uniform class-rate scale for the area east of the Rocky Mountains, avoids, it is claimed, some of the objections to the alternative suggestions to which reference has just been made. It is stated to be a logical and necessary development from the regional rate structure investigations which have done much to rationalize the intraterritorial rate structures during the last twenty years, but which did not bring about uniformity as between territories. Interterritorial shippers using class rates have claimed that they were adversely affected by the disparities between intraterritorial and interterritorial class rates, especially when shipping into Official Territory where these disparities were greatest. These difficulties were intensified by the existence of three separate freight commodity classifications. As was stated in the *Class-Rate* case, so long as through rates

between points in different territories were made by combining rate factors to and from the territorial gateways, the existence of separate classifications occasioned relatively little difficulty. "But the advent of interterritorial class rates, governed by a single classification, created complicated tariff problems, numerous instances of undue prejudice and preference, departures from the long-and-short-haul and aggregate-of-intermediates provisions of Section 4 of the Act, and rates different in opposite directions between the same points."[5] It may be argued, therefore, that a uniform class-rate scale and uniform classification, in addition to having other advantages, materially simplify both rate making and the problem of rate regulation under the Interstate Commerce Act.

A final point with regard to the class-rate decision may be noted. To quote the Commission, "Cost of service has been explored and analyzed more comprehensively and thoroughly than in any other similar investigation."[6] More particularly, the extensive cost exhibits in the case permitted the calculation of costs separately for each type of equipment, for each weight of load, and for each length of haul. Another refinement is that costs were computed not only for the Eastern District, Southern Region, and Western District but also for their important subdivisions, both separately and in various combinations with the larger rate territories of which these subdivisions are a part. Still another feature is that both out-of-pocket and fully distributed costs were developed, the former coinciding roughly with the economist's concept of long-run average variable unit cost and the latter being the sum of such out-of-pocket costs and a pro rata distribution of the constant costs per unit of traffic.

In conclusion, although the class-rate decision affects a relatively minor percentage of the total volume of rail traffic, two aspects of the decision—its broad approach to the problem of rate regulation and its extensive utilization of cost data—may be significant.

IRSTON R. BARNES: In discussing Mr. Smith's paper, I shall confine my remarks to the public interest issues relating to the rate-making procedures of interstate carriers. The fundamental issue grows out of the strategic position of transportation. Public policy considerations in rate making must be paramount, for transportation rates trace the blueprint of the national economy, determining what producers can produce, what markets can be served, where capital shall be invested, and where jobs may be found. Rate making, whether private or public, is an exercise of sovereignty that reaches beyond the transportation industry. Does the public interest require that the antitrust laws continue to apply to rate making in transportation?

Clearly the antitrust laws do apply to the railroads and other interstate carriers even though they are regulated by the Interstate Commerce Commission. Within the year, the majority of the *Supreme Court in Georgia* v. *Pennsylvania Railroad Company* held that carriers are subject to the antitrust laws and that the rate-making activities of rate bureaus and carrier

[5] *Class-Rate Investigation, 1939*, 262 I.C.C. 447 (1939) at p. 504.
[6] *Ibid.*, p. 688.

associations may be violations of those laws, the provisions of the Interstate Commerce Act notwithstanding.[1]

The objectives of the Justice Department should be apparent to anyone familiar with antitrust history. The Department does not seek "to control the administrative discretion of the Commission" or to usurp its rate regulatory functions. Nor have the Department's actions been calculated to induce "indiscriminate rate cutting among the carriers, all leading to general reductions in rates." The Department seeks simply to permit that competition sought by Congress and to "eliminate from rate making the collusive practices which the antitrust laws condemn and which are not sanctioned by the Interstate Commerce Act." It also seeks the elimination of those restrictive and coercive industry controls which have prevented carriers from improving service. In short, the objective of antitrust policy is a surgical operation that will restore the transportation industry to competitive health, not the adoption of a continuing therapy or regulation of interstate carriers.[2]

Moreover, no antitrust action suggests that in establishing rates the carriers are to follow standards different from those prescribed by the Act for both the carriers and the Commission. The carriers are expected to initiate rates which are reasonable, nondiscriminatory, and compensatory, but under the Act they are expected to do so as individual carriers, not as members of an organization which controls the determinations of the individual carriers. In initiating rates, the individual carrier will, of course, take into account the impact of those rates on other carriers and on the entire economy.

Furthermore, no conflict exists between the antitrust laws and the Interstate Commerce Act. The Commission can regulate effectively only if the Department of Justice does its task of assuring a transportation industry

[1] 324 U.S. 439, Mar. 26, 1945. At pages 456–457, the majority stated: "These carriers are subject to the antitrust laws . . . . But Congress has not given the Commission comparable authority to remove rate-fixing combinations from the prohibitions contained in the antitrust laws. It has not placed these combinations under the control and supervision of the Commission. Nor has it empowered the Commission to proceed against such combinations and through cease and desist orders or otherwise to put an end to their activities. Regulated industries are not per se exempt from the Sherman Act . . . . None of the powers acquired by the Commission since the enactment of the Sherman Act relates to the regulation of rate-fixing combinations. Twice Congress has been tendered proposals to legalize rate-fixing combinations. But it has not adopted them. In view of this history we can only conclude that they have no immunity from the antitrust laws."

And again in discussing the determination of joint through rates, the majority stated, at pages 458–459: "It is sufficient here to note that we find no warrant in the Interstate Commerce Act and the Sherman Act for saying that the authority to fix joint through rates clothes with legality a conspiracy to discriminate against a state or a region, to use coercion in the fixing of rates, or to put in the hands of a combination of carriers a veto power over rates proposed by a single carrier. The type of regulation which Congress chose did not eliminate the emphasis on competition and individual freedom of action in rate-making . . . . The Act was designed to preserve private initiative in rate-making as indicated by the duty of each common carrier to initiate its own rates . . . . If a combination of the character described in this bill of complaint is immune from suit that freedom of action disappears. The coercive and collusive influences of group action take its place. A monopoly power is created under the aegis of private parties without Congressional sanction and without governmental supervision or control."

[2] Not all of the monopolistic influences that are alleged by the Department of Justice operate through the rate bureau machinery as such. Some of the restrictive practices are alleged to have been effected through associations of railway executives and even by the Association of American Railroads.

free from hidden restraints and monopolistic controls. If Justice fails in its task, the performance of the transport industry will fall short of the standards envisioned by the law even though the Commission acts with the highest competence on matters coming before it. The Commission and Justice are in fact complementary. Incidentally, the Department's proceeding against the Middlewest Motor Freight Bureau and the Rocky Mountain Motor Traffic Bureau was in response to a reference from the Commission.[3]

Finally, it is impossible to accept the thesis that the Interstate Commerce Act provides complete protection for the public interest and that Congress, therefore, intended that the antitrust laws should not apply to carriers. Consider Mr. Smith's assertion that the proper standard is "the standard of a reasonable maximum rate," and his denial of the existence of a "zone of reasonableness." Inasmuch as the Commission lacks power, in the absence of discrimination, to require that a rate be reduced if it does not exceed the maximum reasonable rate, the public requires the protection of competition to induce carriers to fix rates below such maximum rates. In the *Georgia* case, the majority emphasizes this point:

> The fact that the rates which have been fixed may or may not be held unlawful by the Commission is immaterial to the issue before us. The *Keogh* case indicates that even a combination to fix reasonable and nondiscriminatory rates may be illegal. 260 U.S. p. 161. The reason is that the Interstate Commerce Act does not provide remedies for the correction of all the abuses of rate making which might constitute violations of the antitrust laws. Thus a "zone of reasonableness exists between maxima and minima within which a carrier is ordinarily free to adjust its charges for itself." *United States* v. *Chicago M., St. P. & P. R. Co.*, 294 U.S. 499, 506. Within that zone the Commission lacks power to grant relief even though the rates are raised to the maxima by a conspiracy among carriers who employ unlawful tactics. If the rate-making function is freed from the unlawful restraints of the alleged conspiracy, the rates of the future will then be fixed in the manner envisioned by Congress when it enacted this legislation.[4]

The proper standard is not the "reasonable maximum rate." The proper standard is the lowest reasonable rate, for larger contributions to undistributed overhead costs may more likely be found in that lowest reasonable rate which induces a large volume of traffic and the full utilization of carrier plant and equipment. Yet the testing of the market to discover the lowest reasonable rate will never take place if bureaus and associations stifle all independent, competitive rate making, and if the Commission is unable to order reductions below reasonable maximum rates.

Let us now look at the functioning of rate bureaus and carrier associations. These organizations cannot be described as conferences of carriers and shippers; in most conferences, the shippers leave after they have presented their views, all further discussion and all voting being in secret executive sessions. Rate bureaus are not intended to secure reductions and adjustments for shippers; indeed, rate reductions inevitably encounter strong inertia. Nor may it be said that rate bureaus are designed to give effect to Congressional declarations of national transportation policy or to aid the Commission in the discharge of its functions. Finally, there has been

[3] *Regulation of Rate Bureaus, Hearings before the Committee on Interstate Commerce*, United States Senate, 78th Cong., 1st sess., on S. 942 (May 18 to June 30, 1943), p. 268. No other general report has thus far been made based on the actual files of the rate bureaus and associations.

[4] 324 U.S. 439, at pages 460–461.

no absence of shipper complaints against the delays and frustrations inherent in association rate making. But even an absence of shipper complaints would not demonstrate that the activities of rate bureaus and carrier associations are in the public interest, for shippers are sometimes relatively indifferent to the level of rates charged if they can pass on transportation costs to the consumer; indeed, certain shippers may prefer higher rather than lower charges if they find in the prevailing level a protection against new competition. The ultimate victims of any monopolistic influences in rate making are the consumers, who are unorganized and unable effectively to press for lower transportation charges.

The fundamental evils of rate bureaus and carrier conferences are those inherent in any industry system of price making and are familiar to all who are acquainted with developments under the NRA codes. Where rates are determined by group action, competitive influences are stifled; the rates fixed are, in the true economic sense of the word, monopoly rates; that is, they are calculated to yield the maximum net revenues to the group as a whole. Even where only one or two carriers are concerned, a proposed rate must be presented to all of the carriers in the territory, and if a reduction, may be rejected simply because its psychological consequences may be feared. Where group rate making prevails, there is an almost irresistible pressure to maintain rates, and more efficient carriers are unable to perform the full measure of service which the public would purchase if their rates reflected their own costs. Now this is no argument that rates should invariably reflect the costs of the most efficient carrier regardless of the impact upon others. However, it is an argument that only the Commission itself can safely determine the extent to which the needs of the industry shall override competitive considerations in rate making.

Conferences forbid carrier rate action without compliance with docket procedures, and even after full compliance, waiting periods are imposed, thus enabling the entire industry to bring pressure on the carrier that would act independently. In the rail conferences, a hierarchy of committees, through which appeals have to be carried, gives opportunities for delays of months before a carrier is free to act independently.[5] Similar procedures help to "wear out" proposals for rate reductions in the motor carrier field.

The past conduct of rail and motor carrier conferences has demonstrated that independent action, though generally affirmed in the bylaws, is in actuality incompatible with presently established procedures.[6] Independent action has been stifled by normal docket procedures, by long delays inherent in successive appeals, and by coercion both within and without the conference organization.[7] Members are often required to file exclusive powers of attorney for the publication of their rates, thus precluding any action outside of the conference or even any membership in a different conference.[8] Efforts have even been made to interfere with the rate making of nonmem-

[5] *Hearings, S. 942*, pp. 144, 152, 185.
[6] *Hearings, S. 942*, pp. 116–122, 152, 187–189. See also *In Re Trans-Continental Freight Bureau*, 77 I.C.C. 252, at pages 272–273.
[7] *Hearings, S. 942*, pp. 491–509.
[8] *Hearings, S. 942*, p. 577.

ber carriers. Members of motor carrier bureaus have been forbidden to concur in the establishment of through routes and joint rates with carriers that are not members of the same or of an affiliated conference, thus effectively excluding nonmember carriers from the long-haul traffic and exerting pressure on them to join the conference.[9] Nonmembers have also been the victims of other obstructionist tactics.[10]

Whether the devices and activities used by carrier associations to penalize or prevent nonconformity or independent action in the making of rates constitute "coercion" is a matter of definition. In the railroad field, the carriers are so thoroughly conditioned to association procedure, the submission of the individual carrier to the dictates of the group is so much a part of the mores of the industry, that the extreme types of coercive pressure are normally unnecessary. Thus, the very absence of coercion in the face of the frequent rejection of individual carriers' proposals is perhaps the best evidence of the extent to which competitive influences have been suppressed. Yet even in the railroad field, unusual remedies are sometimes used and in the Western Agreement, which became effective on December 1, 1932, between all carriers affiliated with the Western Association of Railway Executives, was to be found an elaborate organization for assuring conformity to an agreement "for securing definite co-operation among them to the end that consideration may be given from the general standpoint of all railroads in the district, rather than from the standpoint of an individual railroad, to all matters affecting" general railroad policy, rates, service, train schedules, and terminal accommodations.[11] The administration of the Western Agreement was entrusted to a Commissioner, to whom appeals might be taken in all controversies which "might adversely affect the earnings of any other... parties." The Commissioner was directed to refer all unsettled controversies to a Committee of Directors, whose members would seek at the top policy level to assure compliance. The Association of American Railroads also functions on a nation-wide basis to resolve controversies between carriers and associations.

It may be significant to note that actions to restrict competition have not been confined to rate making. Time limits were established by western roads for the delivery of cars of perishables to eastern connections and delays were imposed on railroads capable of more expeditious service;[12] the furnishing of faster passenger service was resisted.[13] Restrictions were imposed on the installation of air-conditioned equipment, and it was even attempted to require that the air-conditioning equipment of cars taken from eastern connecting railroads be shut off before the cars were operated by the western railroads.[14] Proposals to increase passenger travel by the in-

[9] *Hearings, S. 942*, pp. 110, 462, 576–583.
[10] *Hearings, S. 942*, p. 463.
[11] *Hearings, S. 942*, pp. 127–132.
[12] *Scientific and Technical Mobilization, Hearings before a Subcommittee of the Committee on Military Affairs*, United States Senate, 78th Cong., 1st sess., pursuant to S. Res. 107 and on S. 702, pp. 1411, 1413, 1415, 1416, 1419, 1423, 1441, 1460.
[13] *Hearings, S. 702*, pp. 1419, 1442, 1474.
[14] *Hearings, S. 702*, pp. 1357–1358, 1386–1396, 1402.

stallation of recreational facilities, including motion pictures, and other improvements in service were defeated.[15] Restrictions were even imposed on the individual railroad's right to advertise and to solicit traffic.[16]

The motor carrier bureaus furnish other instances of coercion in rate making. Carriers have been forced to withdraw from rate conferences and have been compelled to assume the costs of independently publishing all of their rates where they persisted in making individual rates.[17] Proposals of independent announcements have brought threats to cancel the carrier out of all bureau tariffs.[18] There is even some questionable pressure in the common practice for rate bureaus to protest to the Interstate Commerce Commission against rates filed independently, asking a suspension and investigation of such rates, thus utilizing the resources of the bureau against any carrier acting independently.[19] Some conferences have resorted to threatening strikes, and in at least one instance, it appears that a strike was called for the purpose of enforcing compliance with conference rates.[20]

In short, rate bureaus and associations have maintained rates at higher levels than would otherwise have prevailed,[21] even accomplishing an elimination of competition between rail and highway carriers and a raising of motor carrier rates to the level of rail rates.[22] Improvements in service have been withheld and technical improvements have been delayed. The results have been harmful to the industry and to the public. An inflexible rail rate structure was largely responsible for the inroads which motor carriers made into rail traffic and made it possible for the trucks to carry much traffic that could be handled more efficiently by the railroads.[23] Motor carrier rate conferences have favored the growth of larger carriers and have been a factor in the elimination of smaller carriers.[24] The entire transportation industry would today be a better balanced sector of the national economy if competitive forces had had more scope.

In conclusion, it should be noted that the presumptions with respect to rates fixed by the collective action of all competing carriers are quite different from the presumptions which attach to rates filed by individual carriers in response to competitive stimuli. Where rates are filed by the carriers collectively, the presumption is that the rates are fixed to maximize the earnings of the carriers as a group or of the dominant members of the group; whereas if a rate is fixed in response to competitive influences, the presumption is that it reflects the costs of the more efficient competitor. Where

[15] *Hearings, S. 702*, pp. 1361, 1421, 1426, 1429.
[16] *Hearings, S. 702*, pp. 1406–1409.
[17] *Hearings, S. 942*, pp. 110, 121.
[18] *Hearings, S. 942*, pp. 111, 469.
[19] *Hearings, S. 942*, pp. 120–121, 145, 463, 475, 500–501. Some bureaus request suspension infrequently; this is true of the New England Motor Rate Bureau and the Eastern Motor Freight Conference. On the other hand, the Middle Atlantic States Motor Carrier Conference and the Central States Motor Freight Bureau have in the past protested practically all independently announced rates.
[20] *Hearings, S. 942*, pp. 562–563.
[21] *Hearings, S. 702*, pp. 1362–1365, 1399, 1421, 1430–1433. *S. 942*, pp. 471, 475.
[22] *Hearings, S. 942*, pp. 464–469, 480, 490–491, 511–533, 535–561, 565–576, 603–624.
[23] *Hearings, S. 702*, pp. 1362, 1365, 1398, 1399.
[24] *Hearings, S. 942*, pp. 110, 462, 463, 473, 475, 494, 576–583.

rates are determined by collective action, the public can be protected only if the rates are subject to the most rigorous regulatory scrutiny to determine whether they conform to competitive cost standards. Is this a responsibility which should be imposed upon any regulatory body? The Interstate Commerce Commission reports 71,000 and 75,000 tariff publications filed in 1943 and 1944, respectively, or an average of 237 and 250 per working day. Many of these tariffs list hundreds of rates. With this vast volume of work, is it not necessary for the efficient functioning of government to give the regulatory agency the assistance that can come from maintaining incentives and opportunities for the carriers to fix their rates in response to competitive standards rather than in accordance with monopolistic principles?

Is it possible to adopt a program for effective regulation of rate bureaus and carrier conferences so that they may be entrusted with determining what transportation charges shall be submitted for the consideration of the regulatory commission? Again, the answer seems clear that monopolistic principles rather than competitive standards will prevail, and that the interests of the industry will take precedence over the interests of the public whenever there is collective rate making. The procedure which the Congress has everywhere prescribed for regulated industries places upon the individual carrier responsibility for initiating its own rates, and through requirement of statutory notice and provision for suspension, assures to all shippers and carriers who may object an opportunity to present their case before a responsible public agency.[25] Only by preserving this measure of competition in rate making have we any assurance that regulation can perform its important responsibilities and that public transportation can be entrusted to private enterprise.

Is there a field of activity wherein rate bureaus and associations may continue to function without endangering the public interest? Clearly, they cannot be entrusted with the determination of rates generally. Carriers must consult together in arranging through routes and joint rates, but such rate-making consultations should be confined to the connecting carriers in the interest of preserving competition between alternate routes. The association may perhaps assist the carriers in complying with the Commission's rate orders, but much that they have done in canvassing issues between shippers and carriers belongs properly to proceedings before a Commission examiner, with public hearings and a formal record. The rate bureaus could serve as publishing agents for the carriers. They could also function in the policing of rules and regulations, and in the preparation of uniform shipping documents and standard records. They could serve as clearing houses for inter-carrier accounts and settlements. Beyond these limited and specified activities, rate bureaus and associations, whether regulated by the Interstate Commerce Commission or policed by the Department of Justice, are fraught with danger to the transportation industry, to its future progress, and to the general public.

[25] And if this procedure fails to afford sufficient protection to the carriers, the Commission has statutory authority to prescribe minimum rates.

JAMES C. NELSON: In considering the problem whether and to what extent exceptions from the antitrust laws should be given to regulated industries, a distinction should be drawn between those regulated industries in which competition cannot exist at all or only in the very limited sense of substitute product competition and those industries in which workable forces of competition not only can exist but do operate. Modern intercity transportation fits the latter category.[1]

In this discussion, I have reached the conclusion that antitrust law policy and transport regulatory policy are not in basic conflict, as contended by Mr. Smith. Thus, it follows that no case exists for excepting carrier rate making from the antitrust laws, although one does exist for recognizing the legitimate functions of rate bureaus. In support of this view, I shall make several points. First, recent structural changes in intercity freight transport have created wide possibilities of workable competition. Second, in formulating our regulatory policies the Congress has not only been aware of these possibilities but, on the whole, has sought to preserve the advantages of a competitive organization in domestic transport. Third, although antitrust law policy and regulatory policy are not in basic conflict, restrictive rate-bureau activity affecting rates and service and our pursuit of the advantages of private enterprise in transport are in conflict. Fourth, arrangements to provide statutory recognition of the useful functions of rate bureaus without giving them, by broad exception from the antitrust laws, license to thwart or inhibit workable competitive possibilities involve no impairment of the independent regulatory process.

Vast changes in the organization of intercity transport have occurred in recent decades. In the early era of federal regulation, the intercity transport industry consisted largely of the railroads—a limited number of carriers in each traffic area and only one carrier at many smaller points. Gradually, this setup changed, with the progress of internal and coastal waterways, the modern development of the highways accompanied by a great growth of truck traffic, and recent advances in air transport. Not only are alternative agencies of transport available today for most lines of traffic and hauls, but on important routes the number of individual carriers of all types has greatly increased and would be subject to considerable expansion under a policy of freedom of entry. These structural changes have greatly enlarged the areas for workable competition, particularly in carriage of freight.

These fundamental changes in the supply of freight services have an important bearing on the real controversy over the initiation of carrier rates—whether rate making should proceed competitively or more in the manner of a regulated monopoly. With respect to this issue, it is pertinent, although not necessarily controlling, that the country has never been willing to organ-

[1] Because of frequent discussions regarding the general future of antitrust law policy in general, it is particularly noteworthy that questions have arisen anew with respect to the application of the antitrust laws to rate making by carriers in a regulated industry. For the resurgence of this controversy after more than fifty years of public regulation of the carriers by the most respected of our independent commissions suggests the unrealistic nature of the assumption commonly made that in all industries where a case exists for direct government supervision there is no need to apply the antitrust laws.

ize its intercity transport facilities on a unitary monopoly basis as it has its electric power and other local utilities. Even when the railroads operated in a basically monopolistic market, it was unquestionably the policy to implement such competitive forces as were operative at the same time efforts were made to control directly the situations where discrimination and other manifestations of private monopoly power were troublesome. Thus, in 1897 the Sherman Act was found to apply to restraints of trade by carrier rate associations, and although regulation after 1920 became more affirmative in character and more complete in the administrative agency's powers as well as in industry coverage, the antitrust laws have been left to apply right down to the present.[2]

Nevertheless, tacit acquiescence in restrictive rate bureau activity during most of that period and expanding regulation are implicitly regarded by Mr. Smith as evidence that the country at last has awakened to the advantages of treating intercity transportation as a regulated monopoly. This assumption requires considerable qualification. Although economic regulation has been extended over a large part of the intercity transport market, it can hardly be maintained that the country has entirely or even substantially ignored the numerous and widespread possibilities for workable competition in transport which developed after 1920—to a large extent because of government promotion of air, highway, and water facilities. Direct statutory prohibitions have been maintained to prevent or limit common control or merger of facilities in different agencies of transport.[3] Moreover, little general support can be found today for interagency integration on a grand scale, leaving regional monopolies, duopolies, or oligopolies, each using all types of facilities, although certain propaganda organizations have given wider distribution to this idea than their actual representation would warrant. The National Transportation Policy and the rules of rate making contain specific standards whose effect is to maintain considerable carrier competition.[4] The fair-value-fair-return doctrine as the guide to rate making was abandoned legislatively in 1933 partially in recognition that it was an inapplicable procedure in the competitive situations faced by the railroads.[5]

There is, indeed, evidence that in extending comprehensive regulation on the rail pattern, the Congress envisaged the desirability of restricting, by *public control* of entry and minimum rates, some of the vigorous competitive forces in transport in the interest of sufficient returns for an adequate service. In permitting relief from the antitrust laws in approved cases of acquisition of control or merger, limited restriction of competition was authorized

[2] See *United States* v. *Trans-Missouri Freight Assoc.*, 166 U.S. 290 (1897); *United States* v. *Joint Traffic Assoc.*, 171 U.S. 505 (1898); *Keogh* v. *C. & N. W. Ry. Co.*, 260 U.S. 156, 161–162 (1922); *McLean Trucking Co.* v. *U.S.*, 321 U.S. 67, 80, 84–88, 93 (1944); *Georgia* v. *Pennsylvania R. R. Co. et al.*, 324 U.S. 439, 456–457 (1945); and I. L. Sharfman, *The Interstate Commerce Commission*, Part I, 1931, pp. 33–34, 52, 112–113, 117, 183–186.

[3] The Interstate Commerce Act, Secs. 5(2) (a) (b), (6), (13), (14), (15), (16); and Sec. 214.

[4] *Ibid.*, Secs. 15a, 216(i), 307(f). See Senator Burton K. Wheeler's statements in *Hearings on S. 942*, Senate Committee on Interstate Commerce, 78th Cong., 1st sess., May 18–26, June 4–30, 1943, pp. 743–744, 825–827.

[5] D. Philip Locklin, "Freight Rates and Related Problems," *Transportation and National Policy* (National Resources Planning Board, 1942), pp. 102–103.

in exchange for regulatory findings of specific gains in economy. When the act as a whole is considered, however, these situations do not support the regulated monopoly thesis, but rather they reflect adoption of a policy of regulated competition. Furthermore, the shipper supporters of the Bulwinkle bill, which would grant rate bureaus liberal immunity from the antitrust laws, have demanded a provision to maintain those laws in full force with respect to associations between carriers of different agencies.[6] In other words, with respect to market situations where competition is most effective, shippers desire no green light for carriers to make rate and service agreements.

In the thirties the Congress obviously recognized that far-reaching structural changes in intercity transport had destroyed the basis of the regulated monopoly approach to rate control inaugurated in 1920. While the Congress was influenced by depression conditions and vested interests to adopt a policy of regulated competition of all surface agencies, the strong emphasis upon competition remaining in regulatory statutes indicates that our antitrust law policy is still complementary to that of the Interstate Commerce Act, except at limited points where carriers have already been granted immunity.

The nation's plain objective of maintaining private enterprise and operation, even of the railroads, gives ground for pausing to reflect upon the implications of restrictive, associative activity with respect to rates and service.

Private operation of domestic carriers has been advocated in large part on the theory that private enterprise is more efficient even in an industry of such fundamental public importance as transportation. Private enterprise is fostered, among other ways, by recognizing that carriers should have the right to initiate rates and service arrangements. That this right is meaningful is indicated by facts showing that perhaps 60 per cent or more of the tariffs filed with the Commission are not approved or disapproved by the Commission or otherwise tested as to lawfulness.[7] Moreover, only infrequent investigations of the conduct of the carriers' business in line with the requirements for honest, economical, and efficient management seem to have been made. In practice, competitive pressures thus appear to have been relied upon to compel carriers to give full recognition to potentialities for improved service at low cost.[8]

[6] See statement of F. F. Estes for the National Industrial Traffic League, *Hearings on H. R. 2536*, Subcommittee of House Committee on Interstate and Foreign Commerce, 79th Cong., 1st sess., Oct. 9–22, 1945, pp. 204–205.

[7] See statements of Commissioner Clyde B. Aitchison, I.C.C., *ibid.*, p. 18; of Irston R. Barnes, Department of Justice, *Hearings on S. 942, op. cit.*, pp. 72, 74–75; and those of other witnesses, pp. 124, 160, 783, 834–837.

[8] In *West Coast Bus Lines, Ltd., Common Carrier Application*, 41 M.C.C. 269, 288 (1942), the majority of the entire Commission said: "In proper cases, the Interstate Commerce Act tolerates monopolies and substitutes the checks of regulation for those of competition. We have, however, recognized that, from the standpoint of the public interest, regulated monopoly is not always a complete substitute for competition. As a practical matter monopolies frequently are not sufficiently responsive to regulation to protect the public interest completely. Moreover, regulation, while it may supply some of the checks of competition, cannot supply all of the stimulus to better and cheaper services."

But does not private associative activity to compel or to persuade carriers into agreement upon rate schedules and service arrangements threaten the attainment of some of the key advantages of private enterprise from a public point of view? Where private sanctions are applied to discourage an independent carrier from filing a lower rate than desired by the majority of the carriers in control of the rate bureau, that carrier's freedom of enterprise is not preserved and cumulatively the process may have a marked inhibitive effect upon rate reductions in line with the cost and revenue situations of individual carriers. Faster service schedules and innovations may be retarded to those that the least efficient carrier can make. There seems to have existed for many years, possibly without the knowledge of public regulatory authority and certainly without that of the general public, both latent and active coercion upon individual carrier members of associations. Simple forms of economic coercion are threats of diversion of traffic unrouted by shippers and of rate reductions on wholly unrelated traffic which is important to the revenue of the carrier desiring to act independently. More flagrant cases include refusal by motor rate bureaus to publish rates named independently by member carriers and directions that member carriers cancel concurrences—a serious consequence to some carriers which, under their restricted operating authority,[9] must depend upon interchange with other carriers and joint rates to reach large terminals from which much of their traffic is derived. Mr. Smith acknowledges coercive practices in trucking and condemns them, but he offers no solution. He does not mention any in connection with railroading, though their existence is common knowledge to those close enough to the field to hear of the operations of the bureaus and associations.

In view of the legislative emphasis upon maintaining competitive private enterprise and the large areas in intercity transport where workable competition can exist, public effort should be directed toward safeguarding the freedom of all carriers to compete except in limited cases where the Commission positively finds that some restriction is justified to effect specific economies or is necessary to maintain adequate service. The Act contains several safeguards to continued existence of independent carriers, but to assure the advantages of a number of competitors there must also be protection against restrictions by industry associations, rate bureaus, and executive committees on the freedom of competitive action by individual carriers.[10]

Only by actually safeguarding the right to compete can the full advantages of private enterprise and workable competition be assured for the public. These advantages are a high receptivity by management to new ideas, techniques, and equipment; an alert responsiveness to service needs of all types; a continual striving by individual firms to shave costs; and a large measure of independent experimentation with rates to increase utilization and to divide traffic in response to changing cost conditions and rates. Assuring that flexibility in the transportation sector will also be an aid to

[9] See *Federal Regulatory Restrictions upon Motor and Water Carriers,* Senate Doc. No. 78, 79th Cong., 1 sess., 1945.

[10] Kent T. Healy, "Workable Competition in Air Transportation," *American Economic Review,* May, 1945, pp. 238, 240.

promoting real stability in the entire economy and a fuller use of economic resources, including those in transport.

Rate bureaus perform obviously useful functions by facilitating co-operative tariff publication, policing of rules, formulation of standards, and dissemination of information on proposed rate changes. They provide channels for assembling shipper views on mutual problems, such as how to retain the economy of full loading of freight cars as war traffic pressures diminish, and also for arranging through routes, joint rates, and divisions of joint revenues—the co-operative methods which many think constitute the best answer to greater economic co-ordination of transport agencies. The practical question, then, is how can the useful functions of these organizations be preserved without permitting them to deny the effectiveness of workable competition by restricting independent competitive action?

The impression has been given that application of the antitrust laws to rate making is unnecessary because every activity of the carriers which may affect the public interest is now regulated. The facts, however, are that except for some wartime supervision neither private rate-making procedures nor all results of their decisions are subject to direct administrative control. Filing of freight and passenger time schedules with the Commission is not required. Agreements by common carriers of utmost importance to railroad patrons, such as to hold cars of perishables from California for seventh morning delivery at Chicago or to refuse to deliver until the following day a carload of grapefruit arriving at Denver before 11 A.M., fall in an area beyond administrative control.[11] Not only is there no specific requirement that the Commission must pass upon rate agreements, but the standard of reasonableness in the Act has been demonstrated to involve a band or zone so broad between minimum and maximum rate possibilities as to be of little value to the small shipper, or to some large shippers, in the absence of competitive pressures.[12] With respect to the sanction of public opinion, only one regulatory investigation of rate bureaus has been made in thirty years or more (at the direction of the Congress by a special Senate Resolution), and rate bureaus and executive associations do not publish the basis of their decisions or generally open their files for disinterested analysis of their operations.

[11] See *Union Pacific R. R. Co.* v. *Spano*, 99 Colorado 47, 59P(2d)75, decided June 22, 1936, the *Denver Rocky Mountain News*, Aug. 8, 1935, and the *Denver Post*, June 12, 15, and 16 and Aug. 8 and 17, for information on delivery restrictions at Denver. See also *Hearings on S. 942*, *op. cit.*, pp. 128–129, 137–142, 152, 158–159, 163, 183–185, 190–191, 207–208, 236, 831–834, 865–866, 975.

[12] For example, in *Arizona Corp. Comm.* v. *Atchison, T. & S. F. Ry. Co.*, 156 I.C.C. 418 (1929), reasonable maximum rail rates on refined petroleum products from Los Angeles group points to Arizona points of 70 cents were prescribed. Although this lawful maximum rate remained effective at least through July 8, 1940, by 1936 actual rates under the influence of for-hire and private truck competition, fell to lows of 18, 30, 35, 38, 49, 50, and 58 cents to Yuma, Phoenix, Prescott, Tucson, Flagstaff, Nogales, Holbrook, respectively. These rates were supported on the railroads as fully compensatory and were found by the I.C.C. to be "reasonably compensatory" and not below reasonable minimum rates in *Petroleum from California to Arizona and Nevada*, 218 I.C.C. 345, 348–349, 357 (1936); and slightly higher rates were found "higher than reasonable minimum rates" in 241 I.C.C. 21, 23, 44 (1940).

It follows that an adequate measure of public protection requires both recognition of the legitimate functions of rate bureaus and action to prevent such organizations from destroying the effectiveness of workable competition by coercive practices to prevent independent action. The former end can be achieved by legislation defining rate bureaus, specifying their legitimate activities, and requiring filing of their articles of organization for conformity therewith. On the other hand, the second objective cannot be obtained by legislation granting broad relief from the antitrust laws and merely requiring rate bureaus to file their charters with the Commission for approval. First, filing of articles of organization would not give any publicity to the basis of the decisions of these private organizations. Second, except with respect to rates, the results of agreements would not have to be filed for approval or disapproval by the Commission and as far as rates are concerned the regulatory body, the ICC, knows officially of none of the rate proposals which are turned down in bureaus. Third, the Commission would be handicapped in the task of surveillance of associative actions by its long-standing reliance upon complaints (coercion may also prevent carriers from complaining) and by its own advocacy of rate-bureau procedure, particularly in the trucking field, in the interest of more orderly and stable rates.[13] In order to know fully the basis of all rate-bureau actions, the Commission would have to inject itself much farther into the carriers' day-by-day activities than the Commission appears to think desirable.[14]

Alert and continuous public surveillance will be necessary to prevent coercive practices by carriers and deliberate procedural delays from impairing the effectiveness of independent competitive action. Even meetings to make through service arrangements could be occasions for making private agreements to restrict competition. This inherent hazard in existing rate-bureau procedures can best be controlled by leaving all carrier actions in restraint of trade subject to the antitrust laws, save for the limited cases where immunity can be justified upon a clear finding by the Commission that economy will result. If competitive corrosion of rates should be retarded in the interest of earnings sufficient for an adequate service, the Commission can order the action upon a public record. On the other hand, if antitrust law policy is to be effective in preventing a denial of the effectiveness of workable competition in intercity transport, the Department of Justice must have adequate appropriations to provide continuous rather than sporadic surveillance of associative activity and a greater certainty of action against coercive practices. A distinction must also be drawn between associative activity resulting in dissemination of information on rate proposals and co-operative facility and service arrangements and those acts by carriers which involve damage to the public interest by restraining competition and innovations in rates and service.

[13] James C. Nelson, "New Concepts in Transportation Regulation," *Transportation and National Policy*, *op. cit.*, pp. 219–224. See statement of Commissioner Clyde B. Aitchison, *Hearings on H. R. 2536*, *op. cit.*, p. 22.

[14] See *Hearings on S. 942*, *op. cit.*, pp. 256 and 880, and the statement of Commissioner Clyde B. Aitchison, *Hearings on H. R. 2536*, *op. cit.*, p. 21.

The continued application of this system of composite policies of control in intercity transport would not involve impairment of the independent regulatory process by subjecting the Commission to control of the Executive or by substituting for its judgment on the facts that of the courts. No affirmative powers which the Commission now has to conduct rate investigations, to order removal of discrimination, to establish maximum or minimum reasonable rates, to restrict entry and the scope of operations, to authorize consolidation with relief from the antitrust laws where in the public interest, or otherwise to take affirmative action to insure an adequate national transportation system would be interfered with. Where the findings of the Commission are ambiguous or insufficient, as they might well be considering the economic complexity of some of the matters heard, the Supreme Court most likely would merely remand the proceeding to the Commission for more careful statement unless errors of law were found. These checks in no wise destroy the process of administrative regulation, but in all probability tend to strengthen its fundamental economic performance.

Preservation of the antitrust laws with respect to rate making and active and continuous enforcement of these laws would reinforce the ability of individual carriers to do what the Act now requires; namely, to initiate rates and services. This reinforcement of competitive impulses would result in the filing with the Commission of a greater volume of new rate proposals, and it might result in more of the filed rates being challenged by competing carriers or affected shippers. To the extent that a transfer to the Commission of functions improperly resting with the rate bureaus occurred, that result would be constructive, for then the case for restricting competition in each instance would be thoroughly aired and a public justification would be necessary.

POSTWAR SHIPPING POLICY

THE WARTIME MERCHANT FLEET AND POSTWAR SHIPPING REQUIREMENTS

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World War II has brought about a revolution in the annals of the American merchant marine. The American public appears to realize its dire need for a national merchant fleet to improve its national and economic security and for the first time in almost a century, American ship operators have at their disposal a large number of modern vessels. The war has established a basis for an efficient and effective American merchant fleet—one which the United States has not possessed for many decades.

The exigencies of this most recent global conflict created a stupendous overseas transportation problem—one which was markedly aggravated by heavy war losses of merchant vessels, the German occupation and blockade of continental European shipbuilding countries, the entrance of Japan into the war, and the vital need for large numbers of naval vessels by the United Nations. That problem was so serious that, during the first few years of the war, less and less water transport capacity was available while the demand for that space increased to fantastic heights.

Realizing that this condition was imperiling the success of the military and naval effort, the United States embarked upon a shipbuilding program which was far larger than ever before contemplated. While the British Empire was made responsible for the construction of a substantial number of merchant vessels, the United States was charged with the duty of building most of the vessels. Its brilliant success in completing that duty is now an accomplished fact; in comparison with previous standards of merchant ship construction, the United States performed a miracle. In 1938, the Maritime Commission had decided upon a construction program of 50 ships per year, but in 1943 it was able to build 1,949 vessels of 19,271,789 deadweight tons. Such a record is truly amazing; it had never been accomplished previously by any single nation or for that matter by all the shipbuilding countries of the world in a similar period of time.

The Wartime Merchant Fleet

As a result of this huge ship construction program, the United States possesses the largest fleet of merchant ships in its history. Not only is it the largest fleet in the annals of the United States, but it is much

larger than any country ever possessed at a given time. According to the best estimate available, that fleet will number about 6,000 dry cargo and tanker vessels of 60,379,000 deadweight tons[1] at the end of 1946, provided present construction schedules are completed and no ships are sold abroad. It will constitute about 60 per cent of the anticipated world deadweight tonnage. As of September 1, 1939, the United States merchant fleet totaled 11,750,000 deadweight tons or about 14.5 per cent of the world total.

The estimate of 60,379,000 deadweight tons is merely tentative and undoubtedly will be subject to some downward revision. Although certain types of merchant vessels used by the military services of a distinctly specialized military design, such as aircraft carriers, tank carriers, and frigates, have been excluded in the computation of the anticipated 1946 American merchant fleet, the Army and Navy still possess a large number of merchant type vessels, an unknown number of which will be returned to the Maritime Commission. Many of these ships, however, will never be put into commercial operation because their design has been changed so drastically by the military services to fit their peculiar wartime needs that their reconversion costs will be excessive. Furthermore, the total includes a number of prewar foreign flag vessels which may have to be returned to their former owners. Some of these vessels were seized during the war, but others were purchased with the provision that, upon request, they must be returned.

Of the approximately 60 million deadweight tons of shipping comprising the anticipated United States seagoing fleet, about 45 million tons will be composed of dry cargo carriers and 15 million tons will be tankers. Prior to the war, the United States possessed about 7,475,000 deadweight tons of dry cargo carriers and about 4,275,000 deadweight tons of tankers.

Composition of Dry Cargo Fleet. From the above data, it is evident that the estimated United States dry cargo fleet will be about five times larger than it was prior to the war.[2] It is far larger than can be placed in operation under the American flag. However, only a part of any war-built fleet can be suitable to the peculiar requirements of normal competitive operations and American operators are interested only in those ships which are most economical and efficient. Such an attitude is easily

[1] United States Maritime Commission, Division of Economics and Statistics, ***Estimated Post-War American-Owned and Controlled Sea-Going Merchant Vessels***, Sept. 27, 1945. All vessel statistics are for seagoing merchant vessels of 1,000 tons gross and over. The estimated fleet includes all vessels registered and documented in the United States, American-owned vessels of Panamanian, Honduran, and Venezuelan registries; United States vessels transferred to foreign governments under lend-lease agreements, and Canadian-built freighters purchased by the United States.

[2] This statement does not consider the increase in vessel carrying capacity due to higher postwar vessel speed.

understood. No industry can operate successfully unless it is provided with the best of specialized equipment; likewise a national merchant fleet cannot be successful unless it is composed of the most suitable types of vessels which are adapted to the specialized requirements of the trades in which they operate.

No criticism can be made of the Maritime Commission for having constructed vessels which are not suitable for peacetime operations. The exigencies of war required the construction of many vessels which primarily were of a utility character. The demand for shipping to prosecute the war was extremely urgent. Shipyards had to operate at full capacity and at maximum output. To attain the necessary production, a policy of building standardized types of vessels of simple design and the installation of the type of available propelling machinery had to be adopted. Changes in design had to be kept at a minimum consistent with military requirements. Special needs were met, whenever practicable, by converting existing types of vessels. Consequently, the United States postwar dry cargo fleet will consist of many vessels which are not ideally suitable for commercial requirements.

The estimated dry cargo fleet of 45 million tons deadweight comprise 4,849 ships. Based upon the probable intensity of demand for vessels included in that fleet for postwar competitive operation, three broad groups are distinguishable: those for which the demand will be (1) most intense, (2) less intense, and (3) least intense.

The most intense demand for dry cargo vessels will center around somewhat less than 1,200 ships of about 8,800,000 tons deadweight or about 20 per cent of the total dry cargo fleet. Most of these vessels were constructed during the past few years and include all types which are suitable for long-term use; a few were built between 1929 and 1939 and while they are fairly old they will be needed for postwar operations. Of those vessels, about 330 ships of 1,500,000 tons deadweight are especially designed for the coastwise trades. Consequently, about 870 dry cargo vessels of 7,500,000 tons deadweight are suitable for operation in other shipping trades of the United States for which the demand from ship operators will be of greatest intensity.

Of the dry cargo vessel types which will be preferred by ship operators, a substantial but presently unknown number will not be available for commercial operation. The Army and Navy now own and control many merchant-type ships and at this time it is uncertain how many of them they will return to commercial use. Of those which will be returned, no information is available as to the number which can be used commercially. Many of the vessels used by the military services were redesigned to suit peculiar wartime needs. In a substantial number of instances the designs of these vessels were altered so drastically that it will cost

more to reconvert them to their original designs than to build new vessels. Obviously, it will be a waste of public funds to put those ships in condition for commercial operation; it will be far more economical to place them in the reserve fleet for possible use in the event of another conflict. It may be necessary, however, to make a few exceptions to such a policy, but the number of vessels reconverted at high cost should be very small. Again, certain trades require vessels of particular deadweight and bale capacities, size, and speed. Some trades require ships with refrigerated space and others require vessels with passenger accommodations. Consequently, ship operators will purchase certain types of vessels and the result will be an excess or a shortage of various types depending upon the demand.

It is evident, therefore, that the amount of vessel tonnage for which the demand will be most intense does not represent the quantity of tonnage which will be available or useful to American ship operators. The United States possesses more tonnage than it had before the war, especially since the speed of the modern tonnage is substantially higher. But if consideration is given to the special requirements of each trade and the cost of reconverting ships used by the military forces to commercial designs, the United States postwar fleet of preferred vessels contains an excess of certain types of vessels and a deficit of other types.

Since the Maritime Commission long-range type vessel constitutes the bulk of the tonnage most desired by ship operators, it is desirable to describe that class of ship briefly. On the basis of designed speed, there are four types of standard long-range freight vessels: the C-1 type of 14 knots, the C-2 type of 15 1/2 knots, the C-3 type of 16 1/2 knots, and the C-4 type of 17 knots. Combination passenger and cargo carriers are of the C-2, C-3, and C-4 types and their speeds are the same as those of the freighters of the same type. In addition, the P-2 type passenger and cargo liner which is designed to transport as many as 550 passengers at 19 1/2 knots—substantially more than the C type combination vessels—has been constructed. Of all these long-range vessels, the C-2 and the C-3 types are most numerous and in greatest demand. They are especially suitable for general cargo trades since they possess an excellent stowage factor; a wide variety of both types of vessels as regards deadweight and bale cubic capacities has been constructed. However, it is possible that both types of vessels, certainly the C-3 type, will be in short supply.

The Victory type vessel of about 10,800 tons deadweight constitutes the bulk of the tonnage included in the group for which the demand will be less intense. It was designed for emergency purposes and is not considered as one of the Maritime Commission long-range type vessels. About 527 of these vessels with a deadweight tonnage of about 5,125,000

are expected to be constructed. On the basis of speed, there are two classes of Victory type vessels: one operates at 15 1/2 knots and in that respect is comparable to a C-2 long-range type vessel and the other operates at 17 knots or 1/2 knot faster than the C-3 long-range type vessel.

While the speeds at which the Victory type ship operates are satisfactory, the vessel does not measure up to certain peacetime requirements. Of all the large vessels built during the war, it possesses the least amount of bale capacity in relation to its cargo deadweight capacity. The resultant low stowage factor limits the use of the ship to routes on which weight shipments predominate; it is not particularly suitable for operation on routes over which a large volume of measurement freight is shipped. However, it will serve the needs of certain ship operators, especially those engaged in carrying deadweight commodities. Only a small number have been sold so far, but a few shipping lines have stated they may use Victory type ships in their postwar operations. At present, a large number are being operated experimentally in the intercoastal trade.

Of the Victory type vessels which have been constructed, 117 of 679,400 tons deadweight have been converted to troop transports (VC-2-S-AP5). As transports, each carries about 1,500 passengers; consequently the cost of reconverting them to commercial service may be excessive. If the expense should be too great, they will probably be placed in the reserve fleet. A number of the remaining Victory type ships should be sold to American ship operators, especially if they prove to be suitable for intercoastal operations; those which are not sold to American operators should be attractive to foreign shipowners.

The ships for which the demand will be least intense are the Liberty vessels and old vessels. These two groups of vessels constitute almost 70 per cent of the total estimated United States dry cargo merchant fleet; including 65 Canadian Liberty type vessels purchased by the United States, there are almost 2,500 Liberty ships of about 27 million tons deadweight and more than 650 old ships of about 4.3 million tons deadweight.

The old vessels can be discounted as a factor in world shipping as soon as the intense postwar demand for ship space has run its course. Most of them were built in connection with the World War I ship construction program and some were built even before that conflict. Some were acquired from foreign countries and may be returned. At best, only a few will be operated for any substantial period of time and most of these will be retained primarily because they possess certain specialized characteristics such as size, type, and equipment which cannot be obtained in vessels built during World War II.

The Liberty type ship, which is of about 10,800 tons deadweight and possesses a speed of 11 knots, presents a problem. It was never intended to be a part of the Maritime Commission long-range vessel program. Much of the United States wartime ship construction effort was devoted to that type ship only because it could be constructed much more easily and quickly than long-range type vessels. Otherwise the demand for shipping could not have been met. That the Liberty type ship performed its work well during the war is a matter of historical record.

Can the Liberty type ship be used successfully under normally competitive conditions? Although its stowage factor is satisfactory, it is generally conceded that this type of vessel is too slow to compete in the liner trades. Furthermore, it is equipped with steam reciprocating engines which in comparison to other types of propulsion machinery are expensive to operate. Prior to the war, that engine type was considered obsolete as a marine prime mover. Not a single American flag line operator has yet contracted to purchase a single Liberty type vessel and few American operators have indicated their intention of so doing.[8] It is possible, however, that a small number may be used as tramps in the foreign and domestic trades to transport bulk commodities which move into storage and thus do not require speed in transit. Foreign flag operators, with low wage rates, may be interested in purchasing a number of these vessels, especially for the tramping trade. In general, few American flag operators will be interested in the Liberty ship. They are confronted with high wage costs and other operating costs which can be minimized in part by operating vessels of higher speed, especially over routes involving long distances; in the nearby trades the character of the commerce and the size and speed of the ship limits the Liberty's usefulness. It can be concluded, therefore, that unless foreign ship operators purchase a large number of the Liberty type vessels, most of them will be placed in the reserve fleet as soon as the demand for shipping returns to normal and used only in the event of a serious emergency.

Composition of Tanker Fleet. Of the 15,000,000 deadweight tons comprising the United States tanker fleet, about 73 per cent or about 11 million tons is modern and of suitable types for competitive deep-sea operation. About 3 million tons is composed of ships which are old, slow, and in comparison to modern tankers, only of moderate size; about 400,000 tons is made up of small tankers needed for local transport and about 660,000 tons of converted Liberty type hulls. It is probable that the converted Liberty type tankers will be placed in the reserve fleet. To reconvert them to dry cargo carriers will entail a large expenditure

[8] Liberty colliers, of which there are 24 of about 250,000 tons deadweight, are excluded from this statement. They were included in the group for which the demand is likely to be most intense.

of money which at present cannot be justified in view of the excessive number which is presently available. As a part of the reserve fleet, they will be available for a future military emergency.

Most of the modern tanker tonnage was constructed during the war and consists principally of T-2 type vessels. It is estimated that there will be 517 of these tankers of 8,650,000 tons deadweight. Each of this type tanker possesses a total deadweight capacity of about 16,800 tons and a speed of 14 1/2 knots. In addition, 46 T-3 type tankers of 827,000 tons are anticipated; those vessels are somewhat faster in speed and larger in carrying capacity.

Comparing the prewar United States tanker tonnage with that anticipated in 1946, an increase of 235 per cent is in prospect. However, if the obsolete, Liberty type and small tanker tonnage is deducted from the total, the increase is reduced to 150 per cent. That figure, of course, does not represent the actual increase in tanker capacity; considering the increase in the speed of the modern tanker fleet, the actual increase in carrying capacity of the modern tanker tonnage is likely to be about 175 per cent.

Even though more tanker capacity will be required by the United States to meet its growing demand for petroleum products, more tankers are available than are required. Consequently, a substantial number of tankers will be available for sale to foreign operators or for the reserve fleet.

Wartime Ownership and Control of United States Merchant Fleet

Prior to the war, most of the seagoing vessels of the United States were owned privately; a substantial number were government owned but the bulk of those vessels was in the laid-up fleet. At present, a very large proportion of the merchant vessels registered and documented in the United States is owned by the government which acquired them by construction, seizure, or purchase from foreign operators and requisition for title from American operators. These vessels, as well as those requisitioned for use, are controlled and directed by the War Shipping Administration, an Agency created February 7, 1942, by Executive Order, except for those which are operated directly by the United States Army and Navy and most of those lend-leased to foreign governments. While the War Shipping Administration controls the operation of the vessels under its jurisdiction, it does not actually operate them. Private operators are utilized as general agents for the management of the ships and as berth agents for the traffic which is transported. Frequently the agents continued to operate ships which they had sold or chartered to the government as well as other ships which the government had acquired. Such a system achieved the dual purpose of centralized public supervision and private operation.

The activities of the War Shipping Administration were co-ordinated with those of the British Ministry of War Transport by means of the Combined Shipping Adjustment Boards established in 1942. The two governmental ship control agencies, combined in this manner, wielded a tremendous influence in bringing about an orderly deep-sea water transportation system since they controlled the bulk of the seagoing merchant tonnage available for operation on the high seas. Neither the War Shipping Administration nor the Ministry of War Transport were deprived of any duties and functions; both agencies put into practice the policies established by the Combined Shipping Adjustment Boards.

With the cessation of European hostilities, an additional international shipping authority was established—the United Maritime Authority. This organization was designed to provide all the United Nations and other associated nations with a voice in international shipping problems, especially during the transition period from war to peace. The Authority does not displace the Shipping Adjustment Boards; it is merely a supplementary organization. It consists of the United Maritime Council on which all member governments are represented and the United Maritime Executive Board, membership to which is limited to the United States, the United Kingdom, France, Norway, and the Netherlands. However, other representatives of United Maritime Authority member governments are invited to attend the meetings of the Executive Board when shipping interests of their nations are concerned.

While government wartime ownership and control of shipping were essential to the success of the military effort, such a policy has no place in the United States peacetime economy. Private ownership and operation with government control which is limited to those matters definitely in the public interest are far more desirable as a national policy. The United States has decided to adopt that system and private ship operators have been encouraged to purchase a large number of vessels. Present wartime controls will be abandoned. They were based upon war emergency powers which have no permanent legal foundation and the shipping industry must be freed from government restrictions which are not definitely in the public interest. If a peacetime international shipping organization is established, its duties and functions will be substantially different from those of a wartime international ship control organization.

Postwar Shipping Requirements

The transition from government ownership to private ownership involves a number of problems, many of which are not pertinent to this paper. To forecast the size of the United States postwar merchant marine and the number of vessels which should be employed by American ship operators is no simple task, especially within the limits of this

paper. Consequently, only the most important problems can be discussed briefly.

The Need for a United States Merchant Fleet. The merchant shipping requirements of the United States have been frequently discussed for a number of decades. Most of the persons engaged in the discussion have taken positive positions: either they are definitely opposed to a United States merchant marine, especially in the foreign trade, or they are strongly in favor of a fleet of substantial size. As a result, little or no progress has been made towards solving the problem. In view of its significance, both to the United States and to certain foreign countries, it is high time that an agreement is reached. But such an agreement must be based upon a complete and realistic approach to the problem. It cannot be attained by a consideration of only one or a few of the factors involved. All phases of the problem must be studied and weighed in relation to each other.

The principal arguments in favor of a substantial United States merchant marine are (1) it is vital to the national security of the country and (2) economic benefits are obtained by the existence of a national merchant fleet. The major arguments against the development and maintenance of an American merchant marine are (1) foreign flag vessels can operate at lower cost than American flag vessels and (2) the dollar exchange obtained by foreign flag vessles is used by foreign nationals to purchase American products and our foreign trade is thereby increased. It is not possible within the scope of this paper to weigh these various arguments.

Problems Involved in Estimating Postwar Shipping Requirements. Since the subject of this paper is limited to United States postwar merchant shipping requirements, the discussion will be concerned primarily with an estimate of the number cf merchant vessels needed for actual commercial operation and their tonnage. Types of vessels cannot be discussed because of space limitations. Such a limitation excludes critical comments upon the requirements of the Army and Navy for peacetime operation and of the reserve fleet essential for emergencies. In view of the increased size of the Navy and the greater number of foreign Army and Navy bases which will be maintained for some time, it is likely that those military departments will insist upon operating a substantial number of merchant vessels on their own account.

The size of the reserve fleet will also be much larger to provide the country with an immediate supply of vessels to meet future shipping emergencies. No final decision has as yet been made of the number of vessels which should be set aside to meet the peacetime requirements of the United States military forces or how many should be placed in the reserve fleet, but both requirements will be substantially larger than

they were before the war. Army and Navy peacetime commercial ship operations should be maintained as low as possible; both departments should use commercial services if at all practicable. A sufficiently large reserve fleet must be maintained so that an adequate supply of vessel tonnage can be made available as soon as a critical emergency arises. Present-day military conflicts require an enormous amount of shipping.[4] Not only do they increase the shipping demands of the military forces, but they decrease the efficiency and effectiveness of all shipping. The use of convoys, circuitous routes, and the inability under wartime conditions to load vessels as efficiently as under peacetime conditions greatly increases the number of vessels needed.

At best, an accurate estimate of the shipping needs of the United States during the postwar period is difficult to make. Many imponderables are involved in the formulation of such an estimate and consequently any determination is bound to be an approximation. It is necessary to forecast the postwar volume of United States water-borne commerce and the proportion of water-borne foreign traffic which vessels of United States registry may be expected to transport.

An estimate of the postwar United States water-borne commerce should be based upon each of the six major divisions into which the United States merchant shipping industry is grouped: foreign, noncontiguous, coastwise, intercoastal, Great Lakes, and inland. Since the bulk of the United States war shipbuilding program was devoted to the construction of seagoing vessels, the discussion will be limited to the first four groups.

Published estimates of United States water-borne commerce for the postwar period are generally unsatisfactory for shipping purposes. The few available forecasts usually have been presented in terms of value and value is a very poor basis to use in estimating the demand for ship carrying capacity. Assuming no change in the composition of the traffic, an increase in the price level will increase the value of the traffic by about the same proportion, but the demand for shipping space will not be changed. Weight and space occupied by cargo are the two factors which are primarily significant in determining the number and types of vessels required to transport freight and the number and class of passengers which are anticipated determines the number and type of passenger carrying vessels which will be needed.

Traffic information must be assembled on a trade route basis by commodities because few trade routes possess a balanced traffic movement.

[4] During 1944, vessel deadweight tonnage controlled by the War Shipping Administration amounting to over 83 million tons was available at United States ports. Of this total tonnage, 45 million and 12 million tons were employed by the United States Army and Navy respectively, 15 million tons were allotted under lend-lease agreement, and 11 million tons were used for civilian purposes.

Commerce on some routes in one direction may be ten or twenty times the traffic moving in the opposite direction. On some routes the traffic may appear to be balanced on a weight basis, but an examination of the traffic shows that bulky shipments which occupy a great deal of space in relation to their weight predominate in one direction and cause the traffic to be unbalanced. While unbalanced traffic movements can be partly compensated for by tramp vessels, round-the-world services, and the use of more than one route, they cannot be wholly corrected. Consequently, many vessels, both line and tramp, are compelled to operate in one direction either in ballast or with light loads. Moreover, the nature of the competition which shipping lines must meet or the requirements of the service may be such that excess vessel space must be provided, especially if traffic moves on a seasonal basis. On some routes larger and faster vessels can be used to decrease the number of vessels required; on other routes small ships of lower speeds must be employed and the number of vessels and their tonnage is increased relatively to the amount of cargo that is carried.

Foreign Trade Shipping Requirements. Of the four United States major deep-sea shipping divisions, that of the foreign trade evokes the greatest interest. The other three deep-sea groups—coastwise, intercoastal, and noncontiguous—are reserved for vessels built in the United States and owned and operated by citizens of the United States; no foreign-built, -owned, or -operated vessel can operate in them except when an emergency arises and then only under definite limitations. But the United States foreign trade is open to vessels of all nationalities and American flag vessels must compete with foreign flag vessels. Since United States ship construction and operating costs are much higher than those of other countries, most American flag vessels operating in the foreign trade must be aided by public funds to enable them to achieve a parity in costs. Consequently, public interest in this phase of water transportation is keen.

Congress has laid down certain general directives in the shipping legislation it has enacted to guide the Maritime Commission which is empowered to develop a merchant marine. In the Shipping Act of 1916, it directed the Shipping Board to "encourage, develop, and create a naval auxiliary and naval reserve and a merchant marine to meet the requirements of the commerce of the United States with its Territories and possessions and with foreign countries." In the Merchant Marine Act of 1920, Congress was much more definite by directing "that it is necessary for the national defense and for the proper growth of its foreign and domestic commerce that the United States shall have a merchant marine . . . sufficient to carry the greater portion of its commerce and serve as a naval or military auxiliary in time of war or national

emergency. . . ." In the Merchant Marine Act of 1928, Congress reaffirmed that policy. In the Merchant Marine Act of 1936, Congress stated that "it is necessary for the national defense and development of its foreign and domestic commerce that the United States shall have a merchant marine (a) sufficient to carry its domestic water-borne commerce and a substantial portion of the water-borne export and import foreign commerce of the United States and to provide shipping service on all routes essential for maintaining the flow of such domestic and foreign water-borne commerce at all times, (b) capable of serving as a naval and military auxiliary in time of war or national emergency. . . ."

These excerpts show that Congress has maintained a resolute position over a period of twenty years with respect to the need for a national merchant fleet for national security and for economic reasons and that its directives apply not only to domestic but also to foreign shipping. In the act of 1916, it directed that American Merchant Marine should be large enough to *meet the requirements* of the United States commerce—domestic, noncontiguous, and foreign. In the Acts of 1920 and 1928, it stated that the American merchant marine should be of such size as to carry the *greater portion* of its commerce. In the Act of 1936, it directed that the United States possess a merchant fleet sufficient to carry its domestic water-borne commerce and a *substantial portion* of its foreign commerce. In all these laws, it stressed the importance of a national merchant fleet for national security reasons.

Obviously, a general directive of this sort must be translated into actual figures. The general consensus among persons responsible for the development of the American merchant marine is that the United States foreign trade merchant fleet should carry 50 per cent of its foreign commerce. That opinion has been sharply criticized. These criticisms, however, are not usually constructive; they do not present an exact figure or even an approximate figure as to the desirable size of the United States foreign trade merchant fleet which could be used as a basis for discussion. They are usually couched in general terms which do not present a solution to the problem.

The United States now possesses a very large number of merchant vessels which must be disposed of in one way or another. The country must make a definite decision as to the manner in which these vessels best can be used. The problem is not only significant, but difficult to solve. The solution cannot be based upon generalities; it must be based upon facts and a realistic program must be developed.

Dry Cargo Vessels—Foreign Trade. Since the advocates of a large United States foreign trade merchant marine have stated that an active fleet sufficient to transport 50 per cent of the foreign commerce and all of the domestic and noncontiguous traffic is desirable, it is necessary to

determine whether a merchant fleet of that size can be developed and maintained successfully under the American flag. Fortunately, statistical data are available to make such a study.

For many decades, American flag vessels have been operated almost entirely as liners; only a few operated as tramps or irregularly as both liners and tramps. To be specific, American flag vessels during the calendar year 1938, carried only 1.5 per cent of the export and 5 per cent of the import tramp dry cargo traffic. Foreign flag vessels carried almost all the tramp traffic with American flag vessels offering virtually no competition. However, the volume of the United States foreign dry cargo trade carried by tramp vessels is large. During 1937 and 1938, about one-third of that trade on a weight basis was carried by tramp vessels; liners carried the remainder—about two-thirds.

Assuming that these proportions continue during the postwar period, can American flag vessels operating almost exclusively as liners carry 50 per cent of the total United States dry cargo foreign commerce? During 1937, that commerce totaled 54 million long tons of which 36 million tons were carried by liners, both foreign and American. Since American flag vessels restricted their activities to line operations almost entirely they would have had to transport almost 27 million tons of dry cargo liner cargo or almost 75 per cent of the United States dry cargo foreign commerce carried by line vessels.[5]

During 1938, the same conditions prevailed even though the foreign dry cargo trade of the United States declined from 54 million to 44 million tons. Can American dry cargo liners carry 75 per cent of the foreign trade liner traffic in the face of severe foreign competition? While that proportion of the traffic was carried by American flag lines before World War II on a very few routes, only an extreme optimist would be willing to forecast the movement of such a large share of the United States foreign commerce in American flag liners on all trade routes. Consequently, it must be concluded that American flag dry cargo vessels cannot obtain 50 per cent of the United States total foreign dry cargo commerce unless (1) a larger proportion of the traffic formerly carried by tramp vessels[6] is transported by liners, (2) the United States develops a substantial fleet of tramp vessels, and (3) American shipping lines which used foreign flag vessels before the war decide to operate United States flag ships. At present, there are definite indications that liners will carry a larger proportion of tramp cargo and that a number of

[5] Since American flag vessels carried a small quantity of tramp traffic American flag liners would have had to transport about 73.9% of the line traffic.

[6] For several decades, liners have been encroaching on the traffic carried by tramps. Such a trend does not mean that the tramp will disappear, since one of its significant functions is to make flexible the supply of vessel tonnage needed on particular trade routes to carry low grade commodities. In 1939, the quantity of tramp tonnage was only slightly below the quantity of such tonnage available in 1914.

American shipping companies which formerly operated foreign flag vessels will purchase or charter American flag vessels for postwar use; these two factors, however, will not change the competitive situation sufficiently to raise American flag dry cargo carryings to 50 per cent.

Since it appears that the United States dry cargo merchant fleet cannot be successful in transporting 50 per cent of the United States foreign commerce moved in dry cargo vessels, what proportion of that traffic can they be expected to move during the postwar period? During 1938, American flag liner vessels transported about 37.5 per cent of the United States foreign trade line traffic. Can that proportion be increased? It is possible to be optimistic in answering that question.

Service is one of the keystones to success for all well-managed industrial establishments. Prior to World War II, the American merchant marine was composed largely of slow, obsolete ships. It did not compare favorably in quality with the merchant fleets of other important maritime countries. During 1938, United States foreign trade dry cargo vessels averaged a speed of less than eleven knots. But during the postwar period, only a few vessels in foreign trade will operate below 15 1/2 knots; indeed many will operate at 16 1/2 knots and a number will even exceed that speed.

American shipping companies are now in such financial condition that they can purchase more ships than they could before the war. The Maritime Commission is well established and as a result of thirty years' experience understands its administrative responsibilities. If the war has brought home its lesson, the American public should appreciate the vital significance of a national merchant fleet to its welfare. Japanese and German flag competition may be insignificant for many years. These factors, alone, indicate that the American foreign trade dry cargo merchant fleet will be an important competitive transportation agency during the postwar period and that it should be able to obtain between 50 and 60 per cent of the total dry cargo liner carryings in the United States foreign trade. If this forecast is accurate, the anticipated American flag liner carryings, together with the traffic carried by American flag vessels engaged in tramp and irregular services, will constitute about 40 per cent of the total postwar United States dry cargo foreign commerce. If the United States should decide to develop a large tramp fleet or if liners obtain a larger proportion of tramp cargo than they did before the war, it is possible that the American dry cargo foreign trade fleet can obtain a larger percentage of the available dry cargo freight trade.

Passenger and Passenger-Cargo Vessels—Foreign Trade. A passenger vessel is defined by United States law as a ship which provides accommodations for more than twelve passengers. All vessels which carry

passengers also transport cargo to a greater or lesser degree. However, vessels which specialize in the carriage of passengers are usually called "passenger" vessels while vessels which derive most of their revenue from the transportation of freight and provide accommodations for a variable number of passengers are called "combination" vessels.

Prior to the outbreak of the war in Europe there were 78 American flag vessels, each of which provided accommodations for more than twelve passengers, operating over United States foreign trade routes; 14 of those vessels derived more than one-half of their revenues from the transportation of passengers and the remainder were combination vessels. Of these 78 vessels, the modern types were usually successful in attracting more than their share of the available passenger traffic. They monopolized the United States passenger trade to and from Australia, the West Coast of South America, the Gulf of Mexico, Atlantic Canada, the Philippine Islands, and China. They carried more than 50 per cent of the passenger traffic between the United States and the Caribbean and the East Coast of South America. Only in the Japanese and trans-Atlantic European trades were they at a disadvantage but that condition was due largely to the small number of passenger accommodations which they provided in relation to the total and to the obsolete quality of many of the American flag vessels employed. Nevertheless, the modern ships were able to fill a larger proportion of their passenger accommodations than most foreign flag vessels.

Concern is expressed in many quarters that air competition will reduce the number of passengers and the quantity of mail formerly transported by water carriers. There is no doubt that water mail service will be reduced and that certain types of passenger traffic will be diverted from water to air; at the same time, air transport will enable certain persons to take long trips—the short vacationer for example—and some of these passengers may wish to travel one way by water. Consequently, while the air carrier may take traffic away from the water carrier, it is also likely to develop water passenger traffic.

Assuming, however, that there will be a net reduction in the volume of water passenger traffic, it does not follow that the number of combination vessels will be reduced proportionately. Indeed, there may be little reduction in the number of combination type vessels operated and there is a possibility that they may be increased in number. Passengers demand frequent and regular sailings. Consequently, the reduction in passenger traffic will decrease the number of passenger accommodations provided by each ship, not necessarily the number of passenger or combination type vessels. An actual case will illustrate this point. The Grace Line which operated two passenger services before the war has stated that it will resume those services during the postwar period: one from New York to the west coast of South America, a subsidized service,

and the other from New York to the northern coast of South America, a nonsubsidized service. It has already agreed to purchase six combination type vessels for the west coast of South America service—the same number operated before the war—but the number of its passenger accommodations will be reduced. It has announced its intention of operating five combination type vessels in the north coast of South America service and these five vessels are to replace three combination type vessels operated before the war. These five vessels, while making twice as many sailings as were made by the three prewar combination vessels, provide accommodations for more passengers than could have been accommodated before the war.

Number and Tonnage of Ships Required. Two estimates have been published indicating the probable number of American flag vessels required for dry cargo and passengers during the postwar period in the United States foreign trade. One study was made by the Harvard Graduate School of Business Administration and the other was made by the Subcommittee on Trade Routes of the Maritime Commission Postwar Planning Committee.

The Harvard report states that the probable minimum American flag foreign trade dry cargo and passenger fleet might be 360 ships of 2,725,000 tons gross and that the probable maximum might be 465 ships of 3,515,000 tons gross. The estimate of the Trade Route Subcommittee, which is purely tentative, indicates that 395 vessels of about 3,900,000 tons deadweight might be required. Converting deadweight tonnage into gross tonnage, the estimate of the Subcommittee on Trade Routes is about the same as the minimum estimate indicated by the Harvard study.

The Harvard study, of necessity, was based upon the use of general value and tonnage statistics. Value figures of the United States foreign trade for certain prewar years, and certain postwar estimates of the value of the United States foreign trade for 1950, were converted into cargo tonnage figures which were used to estimate the probable minimum and maximum number of dry cargo vessels which might operate under the American flag during the postwar period. The estimate of the Trade Route Subcommittee was made upon a trade route basis. The character and volume of dry cargo and passenger traffic moved on each trade route by liners and tramps separately during 1938 were studied, the representative character of traffic that year was analyzed and the volume and type of traffic was adjusted in accordance with the findings. Postwar political and economic developments, including the nature and extent of the competition which American flag line operators could expect to meet, were then considered. Their influence upon the amount and kind of traffic moved during a representative prewar year was measured to determine the probable volume and nature of the postwar traffic

These cargo data were then used to determine the type of vessel which was most suitable and the number of vessels needed for postwar operation on each trade route.

The report of the Trade Route Subcommittee is purely tentative and was made public in order to invite constructive criticism. A full and comprehensive analysis of the comments which are received by the Commission should be helpful in establishing the foreign trade United States merchant fleet upon a sound basis.

Coastwise Trades—Dry Cargo Freighters and Combination Type Vessels. The term "coastwise trade" as used in this section of the paper includes the trade along the Atlantic and Gulf and Pacific Coasts within continental limits of the United States. It does not include the trade of the continental United States carried by vessels through the Panama Canal or along the Great Lakes.

Normally all coastwise trades of the United States are reserved by law to American-built, -owned, and -operated vessels; foreign competition does not exist.[7] Rail and motor transportation provide the principal competition of coastwise water carriers, but their competition, to a great degree, is limited to the carriage of package freight, passengers, and mail. Bulk cargoes, such as coal, phosphate rock, and sulphur, were transported by water carriers before the war at rates which were so far below rates charged by rail and motor operators that no competition between land and water carriers existed for their transportation. Indeed, a number of fertilizer plants located along the Atlantic seaboard had no rail facilities for phosphate rock shipments before the war. They depended entirely upon water transportation for that commodity. Even lumber, which is classified by the Interstate Commerce Commission as package freight, is transported chiefly by water.

The number of coastwise freighters and the amount of their carrying capacity which may be anticipated during the postwar period must be estimated in general terms since no forecast has been made of the quantity and kind of traffic which may be available for water carriers. The following table shows the number of cargo vessels and gross tonnage actively engaged in the coastwise trades for selected years.[8]

Year	*No. of Freighters*	*Gross Tons**	*Year*	*No. of Freighters*	*Gross Tons**
1923	230	647,007	1933	217	719,371
1926	281	793,947	1936	243	816,211
1929	226	670,949	1937	241	835,434
1930	241	736,164	1939	229	806,616

* Gross tonnage is used in this table since deadweight tonnage is not available prior to 1932.

[7] See Shipping Act of August 18, 1914, and Merchant Marine Act, 1920, Sections 22 and 26.

[8] United States Maritime Commission, Division of Economics and Statistics, Employment of American Flag Steam and Merchant Vessels of 1,000 gross tons and over, for the quarter ending June 30, 1923–41.

This table shows that the gross tonnage of freight vessels had increased somewhat during the thirties when industry in the United States was operating usually under depressed conditions. It would appear, therefore, that the tonnage of the coastwise fleet of dry cargo freighters had increased slightly more than the rate of industrial activity. Since the volume of traffic which they carried also increased during the same period, it is possible to be mildly optimistic concerning its future size. Certainly, the competition of land transportation agencies cannot be more severe during the postwar period than it was before the war.

In forecasting the probable size of the coastwise postwar fleet of any cargo freighters, it is well to bear in mind that the industrial activity rates[9] for the years 1929 and 1939 were 110 and 113 respectively, an increase of 2.7 per cent and that the gross tonnages of the fleet under discussion amounted to 671,000 tons and 807,000 tons respectively, an increase of 20 per cent. During World War II an industrial activity rate of 239 was attained, a figure which indicates a peak level of production for some time to come. How high the rate will be during the postwar period is anyone's guess. It should range between 150 and 200 for the next several years. If so, a fleet of 1,070,000 tons gross and about 200 ships at the lower level of industrial activity and a fleet of 1,430,000 tons gross and about 265 ships at the higher level of industrial activity, is indicated. Higher vessel speeds will reduce those estimates. However, the speed of the postwar coastwise fleet of dry cargo freighters will not be increased to the same degree as has been tentatively decided for the foreign trade fleet of cargo vessels. Port calls are more frequent and high speed is not always essential except for package freight. Consequently, an increase of 10 per cent in speed is about all that may be anticipated. Furthermore, many coastwise operations were unprofitable before the war; many lines operated at a loss. Taking these factors into consideration, the coastwise dry cargo fleet of freighters may be not larger than 1,200,000 tons gross comprising about 220 ships and the minimum may be about 960,000 tons gross and about 175 ships. Converting gross tonnage into deadweight tonnage, the postwar fleet under analysis may comprise 1,800,000 tons deadweight as a maximum and 1,440,000 as a minimum.

Coastwise Passenger Vessels. An estimate of the number of passenger and combination passenger-cargo vessels which may be anticipated in the coastwise trades cannot be based upon the rate of industrial activity. As of June 30, 1939, there were 37 vessels of 178,842 tons gross and 139,458 tons deadweight actively engaged as passenger carriers; in 1929, there were 77 vessels of 313,319 tons gross.[10]

[9] Federal Reserve Board Combined Index.
[10] Deadweight tonnage data are not available for 1929.

These data show that the number of coastwise passenger liners has declined drastically. The decline is due largely to rail and motor competition and changing travel habits. No change in that competitive situation can be foreseen. Consequently, an optimistic forecast for vessels carrying passengers in the coastwise trade cannot be made.

It would not be advisable to forecast a larger number of coastwise passenger and combination type ships for postwar operations than were actively engaged in 1939. Indeed, it appears that fewer vessels will be operated. Since a minimum estimate must be based upon grossly inadequate data, none will be made.

Noncontiguous Trades—Dry Cargo and Combination Type Ships

Alaska, Hawaii, and Puerto Rico are the only noncontiguous territories of the United States included in this category. Other United States outlying territories are served by both foreign and American flag vessels and their shipping requirements are included in the foreign trade estimates given above. But these three territories normally are restricted by law only to American-built, -owned, and -operated ships, and they must be discussed as a separate unit.

Competition which American vessels may be expected to meet during the postwar period will come almost entirely from air carriers for passenger and mail traffic. Ship operators specializing in serving these three areas, especially Hawaii and Puerto Rico, will also be required to meet the competition of other ship operators engaged principally in serving foreign countries; however, their carryings are not heavy.

Traffic between the United States and the noncontiguous territories under analysis has increased. Imports are chiefly products of extractive industries—sugar and pineapples from Hawaii; sugar and some fruits from Puerto Rico; and canned fish, lime, and copper from Alaska. The products from Puerto Rico and Hawaii possess a fairly stable and increasing demand and imports into the United States from these two territories reflect these two conditions; during every year of the 1930–39 period that traffic was heavier than for any year during the 1920–29 period. Imports into the United States from Alaska, however, have not increased to the same degree between 1929 and 1939. Exports from the United States to the three noncontiguous territories have also increased in quantity, but they are not as stable as imports. Since those territories do not possess a manufacturing industry of any real significance, except those closely related to the commodities which they produce in large quantity, they depend chiefly upon the United States for the manufactured products which are needed. Both imports and exports should increase during the postwar period but the increase should not be great. A computed projection based upon 1935–39 data indicates an increase of about 30 per cent by the year 1950.

How large a fleet can the three territories absorb during the postwar period? The following table indicates the change in the size of the fleet which has served them for selected years.[11]

Year	Freighters		Combination Ships	
	No.	Gross Tonnage*	No.	Gross Tonnage*
1923	22	76,577	17	91,059
1927	28	101,679	20	121,848
1929	42	165,260	19	120,392
1932	46	208,252	17	102,800
1936	49	222,654	14	89,738
1937	60	283,682	13	88,172
1938	63	311,658	10	72,866
1939	49	259,836	10	73,309
1940	53	273,926	9	72,342

* Gross tonnage is presented in this table because deadweight tonnage data are not available prior to 1932.

The data presented in this table show the number of vessels and their tonnage which has been engaged predominantly in the noncontiguous trades during the quarter ended June 30 of each year. Consequently, it does not show the number of vessels used irregularly in those trades or which have been put in service for a few weeks prior to the end of the quarter. It will be necessary, therefore, in estimating future requirements for those trades, to use the data presented above merely as a guide and to increase the number of vessels to take care of the ships which are not included for the reasons stated.

The table shows that the number of dry cargo freighters and their gross tonnage has increased substantially between 1923 and 1940, but that the number of vessels engaged in the transportation of passengers and their gross tonnage has declined.

Since it has been assumed that freight traffic during the early postwar period should be about 30 per cent heavier than it was before the war, the demand for water transportation space will increase. However, the increased demand for ship space will not be reflected proportionately in the number of dry cargo freighters employed; faster and larger ships are to be employed, especially in the Hawaiian trade. Consequently, the increase in the number of such vessels will be slight; vessel tonnage, on the other hand, should be somewhat larger—probably by about 10 per cent.

It would appear that the range between the minimum and maximum number of freighters should not be wide because of the stability of the traffic for each year as a whole. However, marked seasonal variations are present in all three trades, especially the Alaskan where a number of vessels are laid up during the winter. Peak movements in the Hawaiian and Puerto Rican trades are taken care of by additional vessels which usually operate in other trades and which have been included in the number of vessels required by those trades.

[11] As of the quarter ending June 30 of each year.

It would be desirable, therefore, to consider as minimum the average number and tonnage of vessels used during the 1936–40 period. For maximum postwar requirements, it is desirable to add about 20 per cent. Accordingly, about 55 dry cargo freighters of about 400,000 tons deadweight would be needed as a minimum and about 66 dry cargo freighters of about 490,000 tons deadweight might be required as a maximum.

In view of the steady decline in the number of passenger carrying vessels, it is not possible to forecast an increase in their number. They should be greater in number than is indicated by the above table since few of the combination type vessels engaged in the Alaskan trade are reported as of June 30 of each year. Consequently, it is possible that 15 passenger and passenger-cargo vessels of about 70,000 tons deadweight may be operated as a minimum and 20 such vessels of about 95,000 tons deadweight may be operated as a maximum.[12]

Intercoastal Shipping Requirements—Dry Cargo and Combination Type Ships

The competition which United States ship operators will meet on this route is limited almost entirely to that provided by transcontinental railroads. Except in certain emergency situations, the trade is limited by law to vessels built in the United States and owned and operated by United States citizens; no foreign flag competition is allowed. Because of distance, motor competition will be negligible. Air competition will be no factor as, before the war, railroads carried the traffic that required speed. Rail competition was keen before the war and may be expected to remain so in the future.

Although lumber and its products and iron and steel and their products dominated eastbound and westbound shipments respectively, a substantial variety of other commodities moved before the war in each direction. Dry cargo traffic in both directions has declined; in 1929, it amounted to about 7,000,000 tons but by 1939, it totaled 6,241,000 tons, a fairly high movement compared with the carryings of the preceding eight years. As a result of the decline in traffic during the 1930 decade and a better adjustment of vessel supply to the demand for ship space, the number of dry cargo vessels has decreased as shown for selected years in the following table.

Although the industrial activity rate for the years 1936, 1938, and 1939 was slightly higher than the rate for the years 1923, 1927, and 1929, the number of vessels and their gross tonnage declined substan-

[12] The deadweight tonnage of a dry cargo freighter is estimated usually as 50% greater than its gross tonnage. For combination and passenger ships, no fixed ratio can be used. In this study, past experience for all the ships used in the noncontiguous trades as a group has been used to convert gross tonnage into deadweight tonnage.

*Year**	*No. of Ships*	*Gross Tons*	*Year*	*No. of Ships*	*Gross Tons*
1923	154	885,685	1935	131	727,548
1927	170	954,898	1936	150	835,917
1929	168	950,731	1938	111	648,200
1932	106	634,408	1939	137	804,784

* As of the quarter ending June 30 of each year.

tially. Consequently, too much reliance cannot be placed upon the industrial activity rate to indicate the size of the postwar intercoastal fleet. It seems that the intercoastal dry cargo movement has reached a level which will be maintained for a considerable period of time. Assuming that such a conclusion is correct, the postwar intercoastal fleet of dry cargo freighters which will comprise faster vessels than were employed before the war, should range from a minimum of about 105 ships of 925,000 tons deadweight to a maximum of about 120 vessels of 1,050,000 tons deadweight.

The number of combination passenger and cargo vessels employed on the route before the war was small. Between 1923 and 1940, from 6 to 11 vessels of that type were employed predominantly on the route in the quarter ending June 30 of each year. In addition, the round-the-world vessels operated by the American President Line served the route westbound. The latter fleet was included in the estimated postwar foreign trade fleet and therefore cannot be considered again. Since several thousands of passengers were carried each year in both directions, it appears that there is a place for about six combination type passenger and cargo vessels of about 60,000 tons deadweight in the intercoastal trade.

Tanker Requirements

Tankers are used mostly for the transportation of petroleum and its products, but a few are required to carry molasses and vegetable oils. This paper will discuss only the United States tanker requirements to transport petroleum and petroleum products because almost all tankers are used for that purpose.

More tankers are needed for the domestic trades than for the foreign trade; the requirements of the latter, while substantial, are less than those of the former. Most of the domestic tankers are used in the coastwise trade, especially along the Atlantic and Gulf seaboards. Intercoastal and noncontiguous requirements for tankers are small. In the foreign trade, the need for tankers in the export trade is greater than the need for tankers in the import trade, not because larger cargo tonnages are involved, but because distances are longer.

Domestic Trade. A projection of 1924–39 petroleum production of the United States indicates that crude petroleum production for 1950 will

be about 231 million long tons. In 1939, about one-half of the total United States production was transported by domestic seagoing tankers. Assuming that the same proportion will be carried in 1950, it appears that about 116 million long tons of cargo will be moved by tankers in the domestic trades. Since about 98 per cent of the 1939 United States domestic water-borne movement of petroleum was in the coastwise trade and 1 per cent each was in the intercoastal and noncontiguous trades, it is probable that tankers will be required to carry 113,680,000 long tons of petroleum in the coastwise trade and 1,160,000 long tons each in the intercoastal and noncontiguous trades. Assuming the use of T-2 type tankers, the largest single group of modern tankers possessed by the United States, it is estimated that 271 tankers of about 4,550,000 tons deadweight, 7 tankers of 117,000 tons deadweight and 3 tankers of 50,000 tons deadweight will be required for the United States coastwise, intercoastal, and noncontiguous trades as a maximum.

The minimum postwar United States requirements for tankers may be obtained by modifying the proportion of petroleum and products which will be carried by water. Assuming that only 40 per cent of the total United States crude oil production is carried by tankers, the number of such vessels will be reduced to 224 of about 3,600,000 tons deadweight for all three trades.

Import Trade. Imports of petroleum into the United States during the postwar period will probably be larger in quantity than before the war and most of the imported petroleum should come from the Caribbean area where important oil fields are now being developed. In view of the uncertainty surrounding the quantity of petroleum imports, it is desirable to estimate the number of T-2 type tankers required on the basis of minimum and maximum ranges.

The largest annual volume of imports since 1923 occurred during the period 1928–30, inclusive, and therefore the average annual quantity of petroleum imported during those three years has been selected to determine the maximum number of tankers required for the import trade. The years 1937–39 were selected to determine the minimum number of tankers which may be forecasted for the import trade, not because the smallest volume of petroleum was imported during those years, but because the volume of imports was higher than it was during the depression years of the 1930 decade and less than it was during the prosperous 1920 decade. Since industry in the United States was depressed between 1937 and 1939, it seems that the selection of that period as measuring the lower range is conservative.

Using these two periods as bases, the minimum quantity of petroleum that may be imported is about 19 million long tons and the maximum quantity may be about 31 million long tons per year. United States flag

tankers may be expected to carry about 9 million tons at a minimum and about 15 million tons at a maximum since during the five-year period 1936–40 they carried 48 per cent of the United States total petroleum imports. To carry these traffic volumes, approximately 23 tankers of about 386,000 tons deadweight would be needed as a minimum and about 38 of approximately 640,000 tons deadweight would be required as a maximum.

Export Trade. Exports of petroleum and products from the United States are expected to decrease sharply during the postwar period.[13] The development of oil fields in Saudi Arabia and Iraq, the increasing importance of the Netherlands East Indies fields and much lower oil shipments to Japan, now that its military requirements will be negligible for some time to come, will result in a very substantial decrease in the quantity of United States exports of petroleum—probably to about 45 per cent or 50 per cent of the 21 million long tons exported on the average during the 1937–39 period.

Using the above estimates as a basis, exports of petroleum should amount to 9,450,000 tons as a minimum and 10,500,000 long tons as a maximum. These traffic estimates, adjusted to anticipated changed world markets and the proportion which United States flag tankers may be expected to carry, indicate that about 10 tankers of 168,000 tons deadweight would be necessary as a minimum and about 13 tankers of 220,000 tons as a maximum.

Summary and Conclusion

World War II has brought about a tremendous change in the size and quality of the United States deep-sea merchant marine. It is estimated that this fleet will number about 6,000 vessels of 60 million tons deadweight and that it will be approximately five times larger than it was before the war and constitute about 60 per cent of the estimated world merchant tonnage by the end of the year 1946. Obviously, all these vessels cannot be operated by the United States in its foreign and domestic trades.

Most of the merchant fleet under United States registry is owned and controlled by the government. Since the United States is definitely committed to the policy of private ownership and operation, it faces a problem of disposing its vast holdings of merchant vessels. It must decide how much tonnage its citizens can operate successfully on its various trade routes, the proportion of its foreign trade that should be carried by United States flag vessels, the best methods of transferring ships to private ownership and operation, and the size of the reserve fleet.

[13] Exports of refined petroleum products may be large for a time because so many European oil refineries have been destroyed.

Although the United States possesses an enormous fleet of merchant vessels, a large proportion of its dry cargo ships and a substantial proportion of its tankers are not ideally suitable for postwar competitive conditions. Military requirements for vessel carrying capacity were so compelling that vessels were built which, at the time, were known not to be of value for long-term use. No other policy could have been adopted; otherwise the war might have been lost or its duration would have been unduly prolonged.

Any present estimate of postwar United States shipping requirements must be an approximation which is of value merely as a guide. It must be considered tentative and provisional in character. The probability of the accuracy of such a forecast depends partly upon the validity of the data upon which it is based and partly upon the methods employed in projecting historical data, whenever the use of such methods is justifiable. In the last analysis, the probability that such a forecast falls within a reasonable range of accuracy depends in large measure upon the study and integration of intangibles which, although difficult to express quantitatively, must nevertheless serve as guides for basic assumptions. In this paper, various bases were used to estimate the probable number of vessels and size of the fleet because a common denominator was not available for all routes. It must also be emphasized that complete details could not be given to show how a conclusion was reached as to the number of vessels required; to have provided that information, the paper would have been considerably lengthened.

Type of Vessels Trade Route	Number		Deadweight Tons (Thousands)	
	Minimum	Maximum	Minimum	Maximum
Total	1,045	1,196	11,081	13,103
Dry cargo freighters	659	730	6,005	6,580
Foreign	324	324	3,240	3,240
Coastwise	175	220	1,440	1,800
Intercoastal	105	120	925	1,050
Noncontiguous	55	66	400	490
Passenger and passenger-cargo	129	134	922	947
Foreign	71	71	652	652
Coastwise	37	37	140	140
Intercoastal	6	6	60	60
Noncontiguous	15	20	70	95
Tankers	257	332	4,154	5,577
Foreign	33	51	554	860
Coastwise	215	271	3,450	4,550
Intercoastal	6	7	100	117
Noncontiguous	3	3	50	50

The preceding table summarizes the probable minimum and maximum number of vessels and their respective deadweight tonnages which may be operated on each of the four major United States shipping trade routes.

This table shows that United States postwar shipping requirements for the foreign, coastwise, intercoastal, and noncontiguous trades are estimated to be 1,045 vessels of about 11,100,000 tons deadweight as a minimum and 1,196 vessels of approximately 13,100,000 tons deadweight as a maximum. Although the United States will possess about 6,000 vessels of 60 million tons deadweight, certain types of ships will be in short supply.

Requirements for large dry cargo freighters of the C-1 and C-4 types can be fully met, and probably for the C-2 type. It is doubtful, however, if a sufficient number of C-3 type freighters are available to meet the demands of United States flag operators. There is also a shortage of passenger type vessels, combination passenger and cargo type ships, refrigerator vessels, and small carriers for the coastwise trade. Consequently, a substantial number of dry cargo and passenger vessels still must be constructed.

The supply of modern large tankers is more than adequate to meet the demand of United States flag operators and the number of small and specialized types of tankers should be sufficient to meet all reasonable needs. It is doubtful if any tanker construction will be necessary for a number of years.

If the United States should decide to engage in the tramping trades, the foreign trade fleet will be increased in number and size. At present, no decision has been reached with respect to this matter; consequently it is impossible to estimate the volume of tramp tonnage which might be operated. Without government assistance, only a few tramp vessels will be operated under the American flag.

In addition to the volume of shipping tonnage which has been estimated above, about 3 million tons deadweight may be operated on the Great Lakes and about 2.5 million tons may be operated on inland waterways. It is possible, therefore, that the minimum postwar United States shipping requirements excluding those for tramp vessels will be about 16.5 million tons deadweight as a minimum and about 18.5 million tons deadweight as a maximum. Of this tonnage, only the vessels engaged in the foreign trade are eligible for operating differential subsidy aid; of the lines engaged in that trade, a few operating a substantial number of vessels either will not request or will not be granted such aid.

The difference between the vessel tonnage required for active commercial operation and the total vessel tonnage registered in the United

States will not be entirely available for sale to foreign ship operators. The United States Army and Navy will insist upon operating certain vessels and upon the maintenance of a large reserve fleet of suitable types of vessels. No definite decision has yet been reached as to the number of vessels which those military departments wish to operate or to place in reserve, but studies of those two problems are in progress.

While a very large proportion of the active United States merchant marine will consist of modern types of vessels especially designed for the trades in which they operate, such a condition will not be permanent. That fleet was built within a period of a few years and consequently its vessels are of about the same age and they will become obsolete at about the same time. Superior national merchant fleets consist of vessels of various ages, mostly under fifteen years of age, so that only a relatively small proportion becomes obsolete each year. In fifteen years, most of the present American modern tonnage will be approaching obsolescence and must compete with foreign flag tonnage which will be more modern and of better quality. As a result, the present competitive advantage possessed by the American foreign trade merchant marine will not be of long duration. Its immediate future is bright, but steps must be taken to correct an undesirable condition created by World War II when almost the entire American merchant fleet was built in a short period of time.

UNITED STATES SHIPPING POLICY AND INTERNATIONAL ECONOMIC RELATIONS

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I. *The Problem*

The shipping policy of the United States declares and provides for the promotion of national shipping and shipbuilding. This policy has developed through several decades of experience marked by successive instances of major shipping legislation. In all the major shipping acts enacted since the close of the first World War, the policy of aiding and promoting the national shipping and shipbuilding industries has been positively declared by Congress, and supported by provisions for government assistance. These provisions have not been as extensive as desired by protagonists of national merchant marine expansion. Thus the direct subsidy provisions advocated in the early twenties were not enacted. Nor have proposed measures of shipping promotion been unanimously agreed to nor fully implemented. Treaties of commerce and navigation providing for national and most-favored-nation treatment of shipping were not denounced for the purpose of opening the way for flag discrimination in foreign trade policy. New treaties of commerce and navigation concluded after the first World War continued to provide for national and most-favored-nation treatment of shipping. Trade between the continental United States and the Philippines was not brought within the trades reserved to United States flag shipping. Nevertheless the various shipping acts provided specific measures of direct and indirect assistance to shipping.

As formulated in the Merchant Marine Act of 1936, the national shipping policy declares for a national merchant marine privately-owned and operated with a trained citizen personnel, composed of modern vessels constructed in the United States, and sufficient to carry the domestic water-borne commerce of the United States and a substantial portion of its foreign commerce, and to provide services on all essential trade routes. Measures of government assistance provided by the Act include provisions for direct subsidization and for tax exemption, applicable to operations in essential foreign trade routes only. Construction differential subsidies are calculated to offset lower shipbuilding costs in foreign yards, and operating differential subsidies to offset lower wage, subsistence, and other operating costs of foreign flag competitors; also there is hitherto unused provision for countervailing subsidies to offset, when deemed necessary, competitive foreign measures of shipping assistance.

In addition to measures of governmental assistance to promote the

industry, United States shipping policy also includes significant elements of government supervision, including supervision of the design of subsidized vessels and their operation, of the finances of subsidized companies, of the employment and working conditions of seamen, and of the shipping conferences through which a measure of stability and collaboration in shipping operations is sought through agreements within the industry nationally and internationally.

The successive shipping acts which marked the development of this policy all evidenced intent to promote national shipping activity beyond the level achieved by private enterprise alone. Expansion of national flag participation in the transport of the nation's water-borne foreign commerce has been consistently sought. The repeated declaration of and provision for support and expansion of the national industry marks the policy of shipping promotion as one solidly established in the structure of national policies of the United States.

Meanwhile there has also been development of national policies bearing upon the more general interests of the United States in its international economic relations. This development has been most active over the course of the last decade. These policies, viewed broadly, have an important common feature which is their essence. They seek the restoration, maintenance, and development of a system of international economic relations of a liberal, multilateral character. Their aim is to provide the maximum scope consistent with modern social and economic conditions for the exercise of individual initiative and enterprise in the competitive conduct of international commercial affairs. Their objective is the expansion of mutually beneficial commerce.

An early but important step in the development of these policies was the conclusive adoption and elaboration of the principle of unconditional most-favored-nation treatment of foreign commerce. This principle characterized the commercial treaty negotiations conducted by the United States with other countries during the twenties. Following the initiation of the Reciprocal Trade Agreements Program under the tariff amendment of 1934, the general principle was substantially extended and elaborated. In part this took place through the negotiation of reciprocal tariff reductions. In important part it also developed through the so-called "general provisions" of the trade agreements negotiated by the United States, designed to curb the discriminatory and moderate the restrictive application of quotas, exchange restrictions, and other controls which flourished in the fertile soil of trade and currency maladjustments of world economic depression. More recently the Bretton Woods Agreements have marked the development of policy in the field of international financial relationships through the establishment of new institutions to facilitate commercial enterprise and initia-

tive under the circumstances of the present-day world. Important support to the same end in connection with the immediate problem of world-wide postwar economic readjustment and reconstruction is to be seen in the current negotiation of Export-Import Bank loans, and in the negotiation of a special loan and trade understanding with the government of the United Kingdom, to provide that government with a feasible alternative to the maintenance of severe trade and exchange controls during the reconstruction period.

Comparable aims and method are to be seen in the currently emerging anticartel policy of the United States, with its program for the application of the antitrust principles of our domestic economic policy to international economic relations, as contemplated in the proposed Commission on Business Practices of the International Trade Organization.

The foregoing indicates a difference of principle and objective between the general international economic policies and the national shipping policy in their bearing upon the international economic relations of the nation. This difference might appear to imply a conflict of policies. It would be unfortunate to conclude, however, that such conflict is inescapable and requires sacrifice of essentials on the one part or on the other. Each of the policies is in its essential quality important to the national interest. It is hard to exaggerate the importance to the United States of success in the enterprise of restoring and developing a liberal, multilateral system of international commercial and financial relations, designed to encourage trade expansion and economic growth through private enterprise, individual initiative, and commercial competition. The alternative would imply the maintenance and elaboration of emergency controls over international trade and finance; and would lead to a broad extension of the control of international commercial operations by agencies of the state over most if not all of the world. International economic relations would become characterized by competition between governments rather than between commercial enterprise.

At the same time the maintenance of a positive policy of merchant shipping promotion is required by important considerations of the national interest. In the policy declarations of successive shipping acts, including the Merchant Marine Act of 1936, these are expressed as the national defense and the service of commerce. The bearing of shipping promotion upon the development of commerce is the subject of considerable divergence of views. It warrants further study and analysis by economists, on the basis of the industrial characteristics of the shipping industry and its functioning in the development of national and international economy. The consideration of national security provides a broad foundation of general agreement as to the significance

of shipping policy to the national interest. The importance of an active shipping and shipbuilding industry, capable of rapid and great expansion in emergency, as an essential instrument for conveying military striking power abroad in protection of the national security at home, has been too well demonstrated by recent experience to require elaboration here.

It is therefore important in the national interest that basis be found for the development of shipping policy compatible with the development of the general international economic policies of the United States. The essentials of the shipping policy required in the national interest need to be developed and administered with the maximum possible consistency with the requisites of broader policies. The latter require to be formulated and applied with due consideration for the basic essentials governing shipping policy. The problem involved in the bearing of shipping policy upon international economic relations is to find a basis for compatibility which will be applicable to current conditions. It should be clearly understood and emphasized that this problem relates only to the policy of merchant marine expansion through government aid beyond the competitive commercial level. No question of restriction of national shipping activities on a commercially competitive basis is involved.

II. *The Current Setting*

As the world emerges from global warfare, the United States finds itself the one major industrial area of the world facing reconversion rather than reconstruction, with industrial capacity enlarged rather than impaired. It has become, for the time being at least, the principal and essential source of material assistance to the war-torn countries for the reconstruction of their economies. Early and satisfactory progress in this reconstruction is of vital interest to the United States, in its bearing upon future economic prosperity, and upon the development of a peaceful world. Also, for the same reasons which motivate the broad policies of the United States in the field of international economic relations, it is important that economic reconstruction be accompanied by the concurrent re-establishment and development of the liberal system of multilateral trade and exchange relations designed to encourage the sound economic growth of the volume of international commerce.

But the task of world-wide reconstruction is so vast and the need for material assistance from the United States so great, if these purposes are to be accomplished, as to impose serious strain upon the resources of the United States during its own period of reconversion, readjustment, and fulfillment of war-deferred domestic requirements. It is necessary,

therefore, that the assistance rendered be applied to essential needs and concentrated upon meeting requirements which the countries seeking assistance cannot economically provide of their own effort.

When critically essential needs of foreign countries for assistance from the United States are so great, the demands on the supply of dollars available or to be made available are so heavy as to require that they be devoted to the purchase of indispensables only. They need to be used for the acquisition of essential goods and services which must be procured from the United States. Under such circumstances the difficulty of finding dollars to pay for services of United States shipping, if the services can be performed by other ships with comparable or even greater economy and with less of a payment problem, is evident.

The war effort of the United States has placed the government of the United States temporarily in a dominant position in international shipping. This results from the tremendous expansion of national shipping activity which was necessary to carry the nation's striking power abroad and at the same time provide supplies and equipment for the striking power of our allies. Wartime construction of merchant vessels in the United States exceeded two-thirds of the total prewar ocean-going deadweight tonnage of the entire world. There were transferred to Allied nations for wartime operation under the defense-aid principle blocs of American-owned tonnage substantial in size by peacetime standards. Even so the volume of ocean tonnage actively operated under the flag of the United States increased by about five times or from about 9 millions of deadweight tons in 1939 (exclusive of laid-up tonnage) to about 45 millions in 1945. A proportionate increase was necessary in the number of seamen employed. Likewise the operating organizations of the steamship companies were called upon to perform a vastly expanded scale of operations as agents for the government.

For all other maritime nations, except for some neutrals and other special cases, the impact of war upon their merchant fleets was rather different. Operations were generally intensified to meet wartime needs, but wartime losses were not fully offset by new construction or other tonnage acquisition. The result has been a net reduction between 1939 and 1945 of about one-third in the total foreign ocean-going tonnage (i.e., excluding that owned by citizens or government of the United States).

At first glance, and in the light of the wartime scarcity of shipping space which temporarily and within limits has persisted somewhat into the postwar period, this position of apparent strength resulting from the tremendous wartime expansion of United States–owned shipping tonnage and United States shipping operations would appear to place the United States in a position to maintain a dominant and controlling

participation in international shipping competition. Closer analysis indicates rather differently.

In the first place, the over-all tonnage statistics conceal a significant factor. Wartime construction of merchant vessels was concentrated upon the relatively large ocean freighters and tankers which provided the best means of swiftly augmenting the carrying capacity needed to support military operations. Wartime losses affected the whole diversified range of vessel types. A change in the composition of the world's merchant tonnage has resulted. Losses of smaller coastwise or short-sea trading vessels and other specialized types have not been made up. Wartime construction of the larger ocean-going freighters and tankers has more than offset losses, and the net loss of foreign-owned tonnage of these types is less acute than the over-all tonnage statistics indicate. By the same token the preponderance of this type in the postwar merchant fleet of the United States results to a lesser degree in a controlling and to a greater degree in a surplus position than would at first glance appear to be the case.

In the second place, the shipbuilding capacity of foreign yards provides a source for the replacement of net tonnage losses of foreign nations, enabling them to resume their lower-cost shipping operations with new ships over no very extended period of years. Of course the exsessive diversion of economic resource and capital abroad from other necessary outlets to urgent shipbuilding would affect adversely the speed of general reconstruction, and would aggravate the subsequent problem of excessive shipbuilding capacity. Disposal of surplus United States tonnage to foreign purchasers should serve to mitigate these tendencies.

In the third place, the present exceptional dependence of the world upon United States tonnage is limited and temporary. Relief and reconstruction needs may be expected to employ a substantial volume of tonnage for the time being, as illustrated by the transport requirements of millions of tons of coal to be supplied from United States sources to meet European needs normally supplied from European sources, until the latter approach normal production. But such movements are temporary and are likely to be more than offset by release of tonnage as a result of terminating military uses. Already more than three hundred ships are laid up, many of them consisting of unfinished hulls or vessels so damaged as not to warrant repairs under present circumstances.

The fact that shipping operations under the United States flag cannot be maintained at or near their wartime peak is generally recognized. Even the more optimistic estimates from sources informed on the subject do not contemplate the continued active operation under the United States flag of more than one-third of the tonnage presently of

United States ownership. More conservative estimates point to a considerably smaller fraction. Preparations for permanent lay-up sites imply official recognition of the prospect that there will be a surplus of tonnage. The shipping position achieved by the United States as a result of its war effort implies an inevitable postwar readjustment of major proportion. The complexity of this readjustment is increased by various other factors.

There is the termination of the wartime international shipping control. The United Maritime Authority expired on March 2. Some temporary arrangements for continued international collaboration on programs of general interest, such as the transport requirements of UNRRA, will be needed. Proposals to continue international control of postwar commercial shipping operations akin to wartime control may be expected. Support for such proposals will be sought in the belief that the anticipated general development of international collaboration in the handling of problems of international interest should include international peacetime shipping collaboration. But proposals for shipping controls of wartime character are likely to contemplate something in the nature of an international shipping cartel which would tend to prevent or restrain shipping readjustment to postwar conditions. It is unlikely that adequately broad international agreement could be achieved in time to make such control effective in the present situation even if the policy of attempting to do so were adopted. The development of desirable measures of international shipping collaboration on the basis of broad peacetime agreement reached through peacetime procedures is to be looked forward to. But it can hardly be brought to fruition so rapidly as to precede a substantial degree of readjustment in international shipping and the clarification of the postwar pattern of international shipping competition.

On the other hand, since the established national shipping policy is to promote national participation in international shipping operations above the level which private commercial enterprise would support without government assistance, the readjustment from the wartime scale of operations cannot be left to find its own level. A clear determination of the appropriate level is necessary.

The foregoing considerations indicate the problems and difficulties involved in the postwar readjustment which faces the shipping industry of the United States. But there are also important favorable factors. The wartime shipping expansion has resulted in a great increase in experience and activity for the national shipping industry. Just as after the last war the industry maintained a substantial expansion over its prewar level, so after this one the maintenance of a further expansion over prewar operations can reasonably be expected. This is the more

likely to the extent that the shipping and shipbuilding industries provide scope for, and witness, the introduction of new techniques adapted to American conditions and ingenuity. At the same time the financial position of the shipping industry of the United States is vastly improved over prewar. Receipts from operating earnings, from insurance for lost vessels, and from requisition have amounted to large totals, even though restrained by government policy.

An important step toward effective shipping readjustment is to be seen in legislation providing for the sale of the government's fleet of war-built merchant vessels. By providing for the sale or charter of vessels to citizens on a statutory price basis far below wartime construction costs, the legislation establishes a source for reconstitution of the operators' fleets with modern vessels. By providing for sale of vessels to foreign purchasers on the same price basis, it makes available a vast amount of useful tonnage to aid the process of world-wide tonnage readjustment and economic recovery. By providing for the lay-up of unsold vessels in a national defense reserve, it contemplates the sealing up of surplus tonnage to prevent its overhanging the market and unduly depressing rates. It may prove that a more flexible measure, more liberal with respect to disposal abroad, would better serve the shipping and general interests of the United States. A more rapid and effective shipping readjustment, with a speedier and more favorable return to more normal conditions under which the long-range policies of national shipping promotion become effectual, might be served by a broader recognition of the international aspects of the ship disposal problem as an important element in world-wide shipping readjustment. The legislation does, however, provide a definite and reasonable basis for the disposal of the gigantic war-built merchant fleet of the United States.

All in all, the position and prospects of the shipping industry of the United States are not necessarily dark, if the complex problem of the present and near future is clearly understood and appropriately dealt with. This implies, however, that the relationship between the national shipping policy and the international economic relations of the United States be understood, and that the divergence between shipping policy and broader international economic policies be harmoniously resolved, without sacrifice of essentials on one part or the other.

III. *Current Discussion and Argument*

An interesting aspect of recent discussion of the postwar shipping problem is the recognition that the present situation is not unprecedented. Frequent assertions that "the mistakes of the last time" must be avoided proceed from the realization that a quarter of a century ago the shipping position of the United States was in many respects not

unlike that of today. Indeed, the same is in a measure true of our general international economic position.

Then as now, wartime necessity had brought about a large wartime merchant shipbuilding program, and with it an accompanying expansion of shipping operations over the prewar scale. Then as now, a wartime expansion in national industrial activity contrasted with impoverishment of the areas of combat; then as now economic reconstruction abroad, important to our own national interests, called for a substantial outflow of credit; and underlying the general situation, though fully revealed only after the onset of widespread depression a decade later, were similar elements of maladjustment in international balances of payments and tendencies toward restriction and bilateralism in trade and exchange. The abrupt transition of the United States from debtor to creditor position led to the problem of scarcity of foreign dollar income in relation to foreign needs for purchases from the United States and in relation to the export capacity of the United States which characterizes the situation today. In specific detail these two situations, a quarter of a century apart, differ greatly. Their essential difference, however, is in scope and intensity. As the scope of the earlier war was essentially continental and of the late war global, so have the problems of shipping readjustment and of general economic readjustment become global.

It might be assumed that with this precedent as a guide we should be able to avoid its errors. It might as easily be assumed that the likeness of the essential factors points to a repetition of preceding experience. In the policies and lines of action currently being formulated and taken by the United States in its general economic relations, there is much ground for anticipation that substantial benefit will be drawn from previous experience. With respect to shipping, this is less evident.

Discussion of shipping policy is not free from timeworn doctrinal controversies. The sterility of these controversies with respect to the problem of developing the national shipping policy in harmony with the nation's broader interests in its international economic relations is indicated by a brief summary of their essence.

Argument on the one side rests essentially upon the classical economic doctrine which explains the determination of prices and the conclusion of business in a free market by the impact of the factors of demand and supply upon each other, operating through the competition of private individual enterprise. This doctrine is readily applicable to certain sections of shipping activity, notably the tramp charter markets. Here marginal difference in rates, spot and forward position of ships, accurate intelligence of fluctuating markets, and swift business decisions are of primary importance. The flexibility of ocean transportation, developed

under the tradition of freedom of the seas, is here turned to fullest account. This doctrinal approach leads to the conclusion that the conduct of shipping operations is performed in the most economic manner and in the greatest general interest when left to its own self-adjustment, and that measures of governmental interference, control, direction, or promotion are in general to be avoided. Of course this argument rests on a partial exposition only of the characteristics of the modern shipping industry; and neglects important considerations of national policy including security considerations.

The other side presents an approach entirely different in character. Its premise is that a national shipping industry participating in the transport of the nation's foreign commerce is an indispensable part of the national equipment. In part this premise is based on national defense considerations and in part upon the contention that a national merchant marine is necessary to promote the nation's foreign commerce. The latter contention rests on various statements, such as that "trade follows the flag," that ships flying the national flag in foreign ports have a prestige and advertising value useful to the promotion of commerce, that in time of emergency only a nation's own vessels can be relied upon to serve its needs, and that national shipping provides more direct and better services. The provision of direct services by operators using vessels registered in a third country is, however, not regarded with approval. Such operators are regarded as interlopers in business which rightfully belongs to the shipping of the countries directly concerned.

This view that the transport of foreign commerce belongs to the shipping of the countries directly concerned constitutes a second basic premise in the argument. It is essentially an application to international shipping of the widespread view that a country's domestic market belongs to the national producers. Its use as an argument in support of government aid to shipping is by no means confined to shipping interests of the United States. It is generally to be encountered wherever national maritime ambitions exceed national shipping activity. Since at least two countries are concerned in each application of this doctrine to international shipping, two claimants to the "right" to transport a particular flow of cargoes may appear. A consequent modification in the doctrine results in the "50 per cent" doctrine—the "fifty-fifty" principle that allocates to each claimant the right to carry one-half of the cargoes transported between their ports. Sometimes this is further developed into the right to carry one-half plus whatever part of the other half the other claimant fails to carry in its vessels. This doctrine, literally enforced in each trade, would of course work to deprive the world's international commerce of the benefits and economies of the roundabout tramping operations which serve to provide low-cost transport services

where economy of transport costs is most essential. The doctrine is never enforced to this extent, however, and not infrequently it is generalized into the conception that every maritime country has the right to transport in its own vessels at least one-half of its total sea-borne foreign commerce.

Clearly these opposing ideologies are so widely divergent in their basic premises and rationale that the resulting controversies, while useful perhaps as exercises for sharpening logic or polishing rhetoric, cannot lead to reconciliation of their opposing conclusions. Some progress toward reconciling the requisites of shipping policy with the essentials of international economic relations is, however, to be seen in one aspect of current discussions. This is the currently renewed discussion of the relationship of government aid for merchant marine expansion to the international balance of payments. This has long been the subject of controversy. Recently the statistical estimates and data available on the international balance of payments of various countries, and particularly the very searching and detailed annual studies of the balance of payments of the United States prepared and published by the Department of Commerce, have given a new turn to these discussions. On both sides support is sought in statistics. The argument itself has continued to be controversial rather than conclusive. There is disagreement as to whether shipping services are equivalent to 2 or 5 per cent of the export total and whether whatever the percentage may be is relatively much or little. The logic of balance-of-payments analysis is not always clearly understood. Thus it has been suggested that export industries which sell in foreign markets should curtail their sales and thereby reduce their drain on foreign dollar receipts. It is argued that the shipping industry should not alone be "picked on" for this purpose. Again, therefore, it must be emphasized that there is no question of curtailing national shipping operations below their competitive level. The issue is rather how far government action should seek to effect expansion of national shipping activity beyond the level which commercial operations would achieve on a competitive basis.

But the significance of the balance-of-payments discussions is to be seen in the implications and consequences of the resort to statistics. Proponents of shipping promotion seek to prove by statistics that the effect of national merchant marine expansion on the balance of payments is minor. Thereby they imply recognition in principle that there is such effect and that it is measurable. On the other side, the refinement and cumulation of data serve to throw further useful light on the subject, and likewise imply recognition that the question is not one for doctrinal economic dissertation but rather for specific economic analysis and measurement.

IV. *Basis for Compatible Development of Policies*

The importance of the balance-of-payments discussions lies not only in the light they will throw on the subject as concepts and definitions are clarified and more complete data developed. These discussions are also important in indicating a procedure for relating shipping policy considerations to the broader considerations of international economic relations.

The international economic policies of the United States are not absolutist or doctrinaire. They are clearly based on essential principle, but they permit of adjustment and accommodation to all essential national interests. The trade agreements policy is not a policy of free trade but a policy of moderating trade barriers to the level found by specific investigation to be necessary to protect essential national interests. The Bretton Woods Agreements do not establish untrammeled free currency and exchange relations, but seek rather the maximum scope for freedom in exchange transactions consistent with essential national interests. The proposed program for the restraint of international cartelization does not call for the absolute ban of all procedures for international commercial stabilization; it even contemplates the negotiation of intergovernmental commodity agreements, subject to the definition and safeguarding of essential broad objectives and with minimum restraint or diversion of trade. Similarly it is possible for a positive shipping policy, implemented through administrative procedures and decisions based on detailed specific formulation of national requirements, to provide the support to the national shipping industry requisite to the protection and promotion of the national interest, compatibly with the broad economic policies supporting and advancing the general national interest.

The key to this objective is to be seen in the specific formulation of the merchant marine requirements essential to the national shipping policy. The basis for such formulation is evident in the Merchant Marine Act of 1936, which declares for a merchant marine sufficient to provide shipping service on all routes essential for maintaining the flow of the domestic and foreign water-borne commerce at all times. This declaration is based on the requirements of the national defense and the development of commerce. The requirements of national defense involve considerations of military character. Obviously, however, they imply a merchant fleet in active operation, and an active shipbuilding industry, to provide a corps of qualified seamen, skilled shipyard workers, operating and management personnel as a basis for rapid expansion of shipping and shipbuilding under pressure of emergency. Likewise the development of commerce, so far as a national merchant marine contributes to it, calls for the assurance of appropriate shipping

services on essential trade routes. Hence the clarification of the nature of the concept of essential trade routes, the specific formulation of their economic character and geographical outline, and the delineation of the national shipping services required on these routes to meet the declared policy, constitute appropriate procedure in the specific formulation of this policy's requisites.

This is clearly in line with the character of the Act of 1936. The principal aids to merchant marine promotion provided in that Act are contingent upon operations of vessels in essential trade routes of the United States. The development of the criteria to govern the determination of what essential trade routes are and which are the essential trade routes is the responsibility of the United States Maritime Commission. Since the establishment of that agency, recurrent study has been given to this subject. Recent extensive and detailed studies under the auspices of the Commission's Postwar Planning Committee a few weeks ago resulted in the publication of a tentative outline of essential trade routes and services suggested as suitable to meet the requirement of the Merchant Marine Act. It is important that criticism of detail or specific characteristics should not obscure the fundamental importance of this line of progressive planning. Objections might perhaps be raised against the detailed character of the proposals. The specific enumeration of ports and sailings and of types of vessels to be used may appear a usurpation of the responsibilities of private enterprise, tending to place the operations in a straight jacket of bureaucratic dictation. This criticism fails, however, if the proposals are regarded as a tentative outline of one pattern by which the requirements of the shipping policy may be implemented, subject to flexible adjustment to meet the reasonable position and views of the commercial interests concerned. Similarly, the objection that such an outline provides too rigid and fixed a pattern to meet the changing requirements of commercial and technical developments is met if the essential trade routes and services are made the subject of continuing and progressive study and review. The objection that such planning provides a narrow, artificial restriction on the expansion of the national shipping industry is not valid, since the objective of such planning is merely to delineate the specific extent and outline of the shipping services which it is the national policy to assure; it provides no limitation or restriction on the expansion which the industry may seek through commercially competitive enterprise.

The usefulness of formulating shipping policy requirements in terms of essential trade route services is great. A basis is provided for the specific, realistic, and documented examination of policy requirements, and for their formulation in a definite, concrete program. The cost of such a program, both direct in the form of subsidies and other govern-

ment aid and indirect in its effect upon other economic interests of the nation through the balance of international payments, can be quantitatively estimated and balanced against the objectives of shipping policy thus served. The specific formulation of the requirements of national shipping policy should serve to facilitate the development of international shipping collaboration. For by defining clearly and specifically the aims and requirements of national policy, a basis is provided for dissipating misunderstandings and limiting or resolving conflicts of objectives vis-à-vis other maritime nations. And the formulation of national shipping policy requirements in terms of a specific presentation of the shipping services in essential foreign trade routes which warrant the government support authorized by law presents a concrete and definite program which can be appraised in terms compatible with the broad program of trade expansion through liberal multilateral international economic policies.

THE DETERMINATION OF POSTWAR OCEAN FREIGHT RATES

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Overseas Rates

Many conditions facing the shipping industry at present are similar to those which existed at the close of World War I; but other factors such as greater experience with international rationalization of shipping in peacetime, somewhat greater emphasis on international economic collaboration in general, more concern with the maintenance of full employment, and the more pronounced trend towards socialism and nationalization of industry in Western Europe are all different. The variables to be considered in the determination of ocean shipping rates have always been numerous, and many of them have been immeasurable. In addition to all the traditional factors that have influenced rates in the past there are the changes in the general milieu brought about by the war. No attempt will be made in this paper to present a concrete picture of the future; instead, an attempt will be made to describe some of the principal variables that will be at work.

It is well known that at present there is more shipping in the world than would have been necessary to carry the volume of world trade that moved prior to the war. An excess supply of tonnage, however, is not a novel situation. It has existed often, and in fact has been quite a common occurrence in most years between 1920 and 1939, as well as from time to time prior to the outbreak of the first World War. The fact that at present there is a shortage of certain specialized types of carriers, such as refrigerator ships and passenger vessels, will only aggravate the condition, as the new construction of these types will render some of the existing unspecialized carriers even more redundant. This, then, is the supply situation—the first important variable to consider.

But an over- or undersupply is relative to demand. When attention is turned to this second fundamental variable, one is confronted by a confusion of imponderables; in fact by all those conditions that will influence the volume, composition, and direction of international commerce. The most tangible of these, quantitatively speaking, is volume.

There are numerous factors that are extraordinarily favorable to an expansion of world trade. The destruction caused by the war and the cessation of production of many articles have piled up a large potential demand. Much of this demand is effective, for large quantities of dollar

[1] The author wishes to express his gratitude to his colleague, Professor Martin Lindahl, for his careful reading of the manuscript.

and sterling exchange are available. Furthermore, large credits will in all likelihood be granted. These circumstances should exist for two or three years, but after that the situation is more uncertain. For world prosperity to be maintained, reasonably full employment will have to be achieved, and this country will have to expand its imports. The necessity for full employment is, perhaps, more widely appreciated now than before, and it is to be hoped that recent emphasis on this problem will be fruitful. The maintenance of reasonably full employment implies a satisfactory level of national income, and this, in turn, involves a larger import trade. For a completely satisfactory level of imports, however, tariff adjustments and adequate credit facilities are also necessary. Many recent developments encourage one to believe that a milieu will be created that will encourage the expansion of multilateral world trade; but until actual results are achieved, these factors all remain variables, the precise effect of which remains unknown. Above all, mutual trust and confidence and political stability are necessary for an expansion of foreign trade in the long run. However, when all these matters are taken into consideration, it appears that in spite of the encouraging future that may exist for world commerce, the volume of shipments that is likely to move, after the more pressing military and relief cargoes have been accommodated, will probably fall short of utilizing the supply of tonnage that will be available, unless an artificial shortage is created by the United States placing extraordinarily large amounts of tonnage in lay-up.

In addition to these major unknowns, there are other variables of considerable importance for the future, such as the effect of industrialization of backward areas and the effect of synthetics and new sources of supply on the volume of trade. While there is much evidence to encourage the belief that the industrialization of backward countries will increase the value of trade, the effect on volume is less clear. In regard to synthetics, Professor Boehler in his "Memorandum on the Technical Long-term Factors in the Reduction of the Volume of Overseas Trade," prepared in 1936 for a joint committee of the Carnegie Endowment and the International Chamber of Commerce, stated that "most apprehensions in regard to a possible reduction of world trade on technological grounds could not be verified in the long run." Nevertheless, these factors remain to contribute uncertainty. In any case, the industrialization of raw material producing countries will bring about changes in the composition and direction of world commerce. Perhaps the general increase in world industrial production will require the movement of a vastly larger volume of raw materials. On the other hand, the processing of more raw materials closer to the source of supply, which will undoubtedly be the tendency in the preparation of weight-los-

ing materials, may leave a reduced volume to move in the overseas trade.

Regardless of the relation of the supply of tonnage to the demand for it, there is every reason to believe that there will be a strong tendency for the actual level of rates to be higher than before the war. All evidence points to substantial increases throughout the world in the cost of operating vessels. Some of these are definitely war costs; but even without these items, operating costs have increased substantially. Wholesale prices are up throughout the world, and while the cost-of-living indices have not risen as sharply, the impulse that higher prices give to demands for higher wages is being experienced universally. The price of fuel, both coal and oil, is above prewar levels, and, in fact, the high price of coal has caused greater interest in diesels among British shipowners in spite of their higher original cost. Improvements in the design of propulsion machinery, however, might easily offset the higher cost of fuel. Construction costs have likewise increased, and it is reported that building a new vessel costs twice as much in Great Britain as before the war. To what extent this is due to boom conditions in British shipyards is not yet clear. Furthermore, the disappearance from the international carrying trades of low-cost, subsidized, Japanese operators has removed a competitor who could operate successfully at lower rates than most. As previously mentioned, however, the general price level is up throughout the world; so a higher rate level can probably be supported without an adverse effect on the volume of trade, assuming, of course, that the increase in rates for specific commodities is not out of line with the postwar price of that article.

In view of all these complexities, it should be obvious that the problem of adjusting the supply of shipping to its demand will in all likelihood be a most perplexing one. In the unlikely event that demand keeps consistently ahead of supply, or roughly equal to it, it is fairly easy to predict the outcome. In this event, rate levels should follow the cost of producing the service fairly closely, although subsidy payments may distort this relationship somewhat. But if supply exceeds demand, either chronically or for fairly long intervals from time to time, prediction is made far more difficult. This latter alternative is all the more likely as long as nations feel that they need shipping for national security as well as for commercial purposes. Even if we assume that much of the tonnage now existing in the world is laid up as a reserve for use in emergencies only, the penalty of obsolescence will promote continual new construction. If ships are necessary to national security (and they will be as long as nations refuse to surrender any of their sovereignty to a world organization and as long as preparations for the next war proceed on the basis of the last), then modern vessels will be demanded.

It has already been stated, however, that the problem of an oversupply of tonnage in the world's markets is not something new; and therefore mechanisms to help adjust supply to demand have long existed in the industry. The shipping industry has for many years been close to what Professor Hayek has called the "half-way house" between planning and competition—being somewhat closer to the latter where the influence of tramp vessels has been strong, and closer to the former in a few instances where rationalization has been practiced. This situation is not surprising, when one realizes that the life of a vessel is ordinarily twenty-five years or more; and when one recalls the decreasing cost nature of the shipping business. Vessels have been constructed in large quantities during times of war, and much of the surplus tonnage thus created has hung over the commercial market for many years after the termination of hostilities. Decreasing costs in vessel operation can be considered from the standpoint of the ship, the firm, and the industry. The vessel itself operates under decreasing cost conditions in most instances, until the ship is full and down (i.e., its weight and space are both fully utilized), the limitations being the size of the out-of-pocket expenses involved in handling the additional cargo and the delay in sailing. This proposition is true whether one ship or more is being handled; but still does not apply impartially to both tramp and liner operations, as the holding over of one vessel for additional cargo may, at times, deprive the following vessel of the line of some of that cargo, particularly when sailings are frequent. In the second place, the firm can achieve economies of scale, principally in connection with overhead expenses and with certain vessel and cargo handling costs. The latter economies are available when the firm is of sufficient size to provide its own stevedoring and perform some of its own vessel repair and maintenance work. Finally, the industry itself may enjoy external economies of scale, some of which might be internal economies to other industries such as shipbuilding and some of which might result from a more favorable conjuncture; but these do not concern us at this point. When one considers the decreasing cost nature of ship operations and the fact that large surpluses of tonnage have been created by wars and other stimuli, it is not surprising that the economic forces of competition are sometimes rather slow in adjusting supply of tonnage to a lower demand schedule.

This fact has long been recognized and received empirical verification by investigations completed by the government of this country in 1914; and by the government in Great Britain in 1909. The problem of excess shipping and unfavorable rates was found to be an old one. Self-preservation had impelled shipowners to organize for the purpose of minimizing wasteful, cutthroat competition as early as 1875. Both the American and British reports recognized the undesirability of unre-

stricted competition and the advantages to be gained from co-operation in the regulation of rates, sailings, etc. It was felt, however, that the conference system, as this form of co-operation was known, would lead to abuses if the shipowners were left entirely to themselves. The measures of self-regulation employed by conference lines, however, are not altogether confined to the fixing of freight rates. Not infrequently they include such co-operative arrangements as the pooling of traffic or revenue. In the United States trades, all such conference and pooling arrangements are subject to review by the United States Maritime Commission which must be satisfied that the agreements are not discriminatory or unfair, as between carriers, shippers, importers, exporters, ports of the United States; are not detrimental to the commerce of the United States; and do not violate any other regulatory provisions of the applicable statutes. It has been the policy of the Maritime Commission and its predecessors to subject ocean carriers in the foreign trades of the United States to as few restrictions as possible, with respect to rates and shipping practices, and still protect the public welfare. Common carriers by water in our foreign commerce are required to file their export rates from this country on all commodities, except those carried in bulk without mark or count, within a period of thirty days after they have become effective. This is only required for imports, however, moving from the east coast of South America to the Pacific Coast of the United States. The Commission's only jurisdiction over export and import rates arises if they are considered discriminatory or detrimental to the commerce of the United States. The Commission has consistently required conferences to admit new lines as members whenever the applicant is considered a bona fide common carrier in the trade route.

During the depressions of the thirties, tramp vessels which had hitherto always operated independently found it necessary to resort to co-operative measures. Under the initiative of a subsidy offered by the British Government the Tramp Shipping Administrative Committee was formed to rationalize this part of the dry cargo industry. Through a scheme of minimum rates and payments for vessels that were laid up, co-operation was secured with tramp owners in other nations. About the same time, an International Tanker Pool was organized to accomplish the same objectives. These pools marked something new under the sun and may well establish a precedent for international co-operation in rationalizing surplus tonnage in the future. Another organization which may provide experience for future use is the Australian Oversea Transport Association which combines in a single formal organization shippers and shipowners. This Association highlights the community of interest that exists between the two groups and stresses the fact, not previously mentioned in this paper, regarding the importance of stable

rates and regularity of sailings to the majority of importers and exporters.

Rate control up to the present has been mainly a function of the shipowners themselves in most areas although the influence of shippers has been recognized in the case of the Australian Association. In Great Britain where the Royal Commission had recommended that shippers should form themselves into associations in order to bargain on more equal terms with the shipping conferences, a conflict of interests between importers and exporters and manufacturers and merchants has prevented the formation of adequate shipper bargaining units. The British experience with the difficulty of forming associations of shippers to deal satisfactorily with the conferences has been far more usual than the results achieved by the Australian Oversea Transport Association. A number of governments have, therefore, superimposed various degrees of authority for the prevention or correction of the abuses to which the conference system was susceptible. Government control of rates in foreign trades obviously has its limitations from the multiple jurisdiction of the countries concerned—and possibly to some extent from treaty obligations. The fact that no serious conflicts have arisen so far is due, apparently, to the general policy of conservatism in the legislation providing such government control and in the very careful administration of existing laws and regulations. Similar difficulties are apt to prevent forceful unilateral action in the future. During the recent war, a high degree of centralized control was achieved by the War Shipping Administration and the British Ministry of War Transport over practically all the merchant tonnage of the allied nations. Government control of rates naturally followed, and such action was usually reinforced by the necessity of general price control. The methods by which this centralization of responsibility was achieved are hardly applicable, however, to a peacetime situation.

On the basis of the foregoing, the writer believes it is reasonable to assume that although the postwar volume of trade is apt to be considerably larger than before the war and that after the major military and relief shipments have been taken care of, the supply of tonnage will be considerably in excess of demand. (Professor J. Russell Smith once estimated that "a surplus of only 2 per cent of shipping sends rates to the bottom";[2] and while this margin may be too small, postwar tonnage might well exceed the demand for shipping by more than this within the next few years.) While higher operating costs will exert an upward tendency on the rate structure, the surplus of tonnage that is likely to develop will tend to depress rates; and movements to rationalize the industry will be renewed. Furthermore, operating expenses are of such

[2] J. Russell Smith, *Influence of the Great War Upon Shipping* (New York, 1919), p. 337.

importance in vessel operation that no appreciable volume of new business could be created by charging rates that did not cover overhead costs. Conference and pooling arrangements have had considerable success but have not always been adequate to the over-all task that has confronted the industry. The acquisition of greater authority, by these extragovernmental, cartel-like agencies, will only increase the responsibility of the governments concerned to protect the rights of the shipping public, which in the past has rarely been sufficiently well organized to deal with the shipping conferences. Furthermore, international competition in the building and maintenance of mercantile fleets, both to promote commerce and security, must be brought under control. The international nature of the industry and the international complexion of the problems both indicate, therefore, the need for an international control organization to: (1) protect the shipping public against the monopoly powers of shipping conferences; (2) help rationalize the economic forces of supply and demand, where ordinary competitive practices fail to make the necessary adjustments with sufficient rapidity; and (3) co-ordinate national maritime policies.

After World War I a similar problem confronted the nations of the world, and although international control was not seriously considered as a permanent arrangement, considerable sympathy was expressed for the continuation of such aspects of wartime control as might be necessary until shipping was adjusted to the postwar situation. Opposition to the continuation of international control, however, gained the upper hand in all the victorious countries; so that the efficacy of control in peacetime was neither proven nor disproven. The result was an overproduction of ships and a depressed level for freight rates. To prevent a repetition of this uneconomic situation and to promote more cordial relations between the maritime nations of the world, an international organization to co-ordinate the industry is again being proposed. Lord Leathers, former Minister of War Transport for the United Kingdom, has recently said that in shipping, no less than in civil aviation, there is much to be said for internationalization as an ideal policy. He believes the international agreement on the pooling and control of the merchant tonnage of the United Nations, as provided by the United Maritime Council, might serve as a starting point. Admiral Land, Chairman of the United States Maritime Commission, has also endorsed the principle of an international organization to co-ordinate world shipping. Experience between the wars with international rationalization of tramps and tankers and greater public interest on this side of the Atlantic in international co-operation both indicate that the prospect for international economic collaboration is brighter now than it was after the first World War.

Great Britain has already accepted in principle the proposal of the United States for an International Trade Organization which would investigate all private cartels or agreements which restrained international trade, restricted access to international markets, or fostered "monopolistic controls." It would seem logical for such an organization to supervise shipping conferences and pools unless the unique problems of the shipping industry make it desirable to create a separate international control body for shipping which, like the International Trade Organization, would work under the general direction of the Economic and Social Council of the United Nations Organization.

In conclusion it might be said that it is quite probable that the determination of postwar ocean freight rates will be characterized by considerably more international co-operation and control than was the case before the war.

Coastwise and Intercoastal Rates

The foregoing discussion has been concerned with the determination of rates in the world markets. When one turns to the coastwise and intercoastal trades of the United States, other considerations become important. Regulation of minimum rates of common carriers operating on these routes has only been in effect since 1938; and the transfer of these regulatory powers from the United States Maritime Commission to the Interstate Commerce Commission in 1940 is supposed to herald a new era in which it is hoped the American domestic transportation system will be co-ordinated. The advent of war and the resultant withdrawal of common water carriers from these domestic services have prevented the Interstate Commerce Commission from exercising its extended powers. It remains to be seen, therefore, whether the declaration of policy in the preamble of the Transportation Act of 1940 will change substantially the Commission's attitude toward water carriers, which in the past has been influenced by Section 500 of the Transportation Act of 1920.

There is some evidence, however, that the Commission may find it difficult to adjust its organization and its thinking so as to be sufficiently flexible to consider highway and water carriers in the light of their own operating conditions and not to judge them by criteria established to solve railroad problems. Specifically, there has been some complaint about the Commission's reluctance to issue certificates of public convenience and necessity to truck applicants. It is argued that when the existing highways are not used to capacity the issuance of certificates should not be based on the same considerations as an application from a railroad that has to construct a new right of way. Co-ordination certainly should not mean the elimination of competition, the fervent hopes of some vested interests notwithstanding; but entry should not be so

unrestricted that the result is "creaming of the traffic" and an oversupply of facilities. This problem will remain as long as the Interstate Commerce Commission can control the number of operators but not the mileage of roads nor the number of ships to be built. Perhaps the Commission should have a voice in the determination of such construction projects; but at best it would only be one of several parties to be heard, as highways are multiple-purpose utilities, and strategic considerations have been of dominant importance in shipbuilding. Water carriers have many characteristics which are quite different from those possessed by railroads and highway carriers; but further evidence is necessary before one can predict to what extent the idiosyncrasies of each agency of transportation will be considered by the Interstate Commerce Commission in reaching its decisions.

There is fairly unanimous agreement, however, that rates will no longer be influenced as much by value of service as they have in the past, but will be based more on cost of service. It should be added parenthetically that rates based solely on cost will be as inappropriate as rates based exclusively on demand. Both blades of the Marshallian scissors are necessary for clean cutting, and a regulatory agency should certainly take into consideration both of these forces. Nevertheless, insofar as cost of service has been underemphasized in the past, it is well that it should be accorded its proper influence in the future. Cost of service, however, is no sooner mentioned than a Pandora's box of plaguing problems is revealed. Some of these the Interstate Commerce Commission might well deem outside its province, and not consider in its determination of costs. For the most part, this group includes elements of cost covered by government appropriations for highway and waterway construction and maintenance, ship construction, etc. The Commission might content itself with considering user taxes and tolls, actual cost of vessels to the domestic operators, etc., as the appropriate cost for their deliberations. These costs might be too high and represent a form of taxation, or it is more likely that they are below actual cost and represent subsidies; but these are matters for Congressional sanction and not for Interstate Commerce Commission control. The Commission or an independent research agency should assist Congress, however, in ascertaining the true dimensions of these subsidies.

Nevertheless, a large number of cost problems remain for the Commission's determination. These are derived for the most part from the different shapes of the cost curves for the various agencies of transportation which comprise the transportation system. For example, the out-of-pocket expenses of common carriers by water are higher than similar expenses of rail carriers. Stevedoring expenses of common carriers by water in the coastwise trade averaged more than $1.80 per ton in 1937;

and averaged more than $2.80 per ton for intercoastal lines in the same year. Since then longshore wages have been raised without a commensurate increase in efficiency. Practices differ, not only between agencies, but in different sections of the nation, and for different commodities; and therefore direct comparisons are hazardous, but ordinarily car loading and unloading costs are less. Furthermore, on rail shipments, shippers frequently perform this service themselves, in which case it is not a cost to the railroad at all, although it is a cost to the shipper patronizing the railroads. The size of the unit of carriage likewise differs. Trucks are small and separate motive power is attached to each one or two units. The unit of a carload on the railroads is also small, but each car ordinarily operates in conjunction with a number of others to make up a trainload. Cargo vessels, on the other hand, while they may vary considerably in size, can usually hold the freight of several trainloads. Until the vessel is full and down and until the trainload is at capacity, operating expenses per unit will decline, although average out-of-pocket expenses will remain fairly constant. Therefore, because of the large operating expenses in making a voyage full or empty, the marginal and average variable cost curves for water carriers drop sharply until the load approaches the vessel's capacity; but, of course, will always remain high enough to cover stevedoring and other out-of-pocket costs. The out-of-pocket expenses of rail carriers are probably lower at first, but the height of their average variable cost curve will depend upon other variable operating expenses. The actual average variable cost is a function of the degree of utilization of the facilities involved. Suffice it to say at this point that rates based on out-of-pocket expenses alone will in all likelihood permit railroads to undercut water carriers, even on long hauls; but rates which reflect the total relevant operating expenses (average variable costs) might bear quite a different relationship. Rates which include not only the relevant operating expenses, but also the appropriate overhead charges and profit (average total unit costs) might reveal still another relationship. Designing appropriate formulae to allocate indirect expense is at best a difficult problem, but it is especially so when there is unused capacity available and when joint costs arise as they do when the volume of traffic shipped in one direction ordinarily far exceeds that moving in the other, which latter situation is true on most routes where ocean transportation is competitive with the rails. In addition, there is the problem of what costs should be regarded as sunk costs and disregarded in cost calculations for rate purposes. Where replacement or betterments are not contemplated, maintenance charges may be all that should be counted.

When attention is turned to the demand side of the picture, the problems involved are no less perplexing. In addition to our general

ignorance regarding demand schedules, the problem is complicated by the fact that time is one of the costs of transportation to the shipper, in some instances being of greater importance than the freight rate itself. Then, too, some carriers, especially railroads, have a volume of non-competitive traffic on which to draw, the revenue from which might serve to obscure underestimated costs on competitive traffic by rendering the over-all results satisfactorily remunerative. While this does not exhaust the difficulties that are inherent in the determination of rates for a co-ordinated transportation system, it does illustrate the complexity of many of the most arduous problems. But what can be detected from these observations that might shed light on the determination of rates in the next few years?

So far we have seen that the consensus holds that the cost of service will have greater importance in the determination of domestic transportation rates than before the war. But cost may mean several things; and as indicated earlier, in economic parlance may be thought of as marginal cost, average variable cost, or average total unit cost which of course includes profit. Professor Locklin has suggested in his chapter in the National Resources Planning Board's, *Transportation and National Policy*, that the Interstate Commerce Commission might fix rates on the basis of the cost of service to the low cost agency. This presumably would be found on the low cost agency's average total unit cost curve; and presumably the rate may be based on a cost higher than the lowest cost point, because of the oligopolistic nature of the industry. (Insofar as the Commission can control expansion of the industry, however, it may succeed in getting the scale of operations close to the optimum point.) High cost agencies could then be required either to charge rates based on their own average total unit costs (which means that their rates would be no less than full allocated costs but which might be at or above their least cost point) or, if they are operating far short of their optimum point, they may be permitted to charge rates that are lower than their full allocated cost (provided they are at least somewhat in excess of out-of-pocket expenses).

The Interstate Commerce Commission followed this latter alternative in a rough way prior to 1940 in granting relief in fourth section (long- and short-haul discrimination) cases. The Commission was only able to approximate this policy in a crude way because of (1) their limited powers over water carrier rates and (2) the accounting difficulties involved. The Commission held that such relief rates must more than cover the out-of-pocket costs to be reasonably compensatory, and in some instances considered 50 per cent of the average operating costs to be a fair basis. Professor Dewey has pointed out that this 50 per cent rule is inadequate because it takes account only of the extra labor, fuel,

and lubrication expenses involved.[3] Several cost studies have indicated that the decreasing cost nature of main line railroad operations has frequently been exaggerated, and that even for railways with low traffic density and considerable excess capacity rates must be higher than 50 per cent of operating costs to be remunerative. Adequate analysis of what constitutes unused capacity is difficult, however, and traditional cost accounting methods designed for managerial and financial purposes do not indicate economic and social costs and therefore are not completely adequate for the regulatory task. When overhead costs are considered, traditional accounting practice is apt to be even more inadequate for rate purposes. True overhead costs, for instance, are fairly constant for a transportation plant of a given size; so when overhead costs per unit are allocated, they depend upon the volume of traffic, which in turn depends upon the freight rate; therefore, overhead costs per unit sometimes are rate determined rather than rate determining. Some of these difficulties arise from the existence of surplus transportation facilities. Perhaps if full employment and a high national income can be maintained and if the Commission is successful in controlling expansion, there may be sufficient business for all forms of transportation to operate closer to optimum capacity, and some of the complications of allocating costs will be minimized.

Because (1) the tractive effort required to move a given weight by water is less than that required to move the same weight by rail, provided the water service does not attempt to operate at too high a speed, and because (2) ocean shipping uses a right of way for which there is no capital charge nor maintenance expense except for port facilities, there is good reason to assume that water carriers are low cost producers of transportation service, at the very least for port-to-port shipments of bulky cargoes on long hauls that are not too circuitous. Therefore, if the Commission uses as a rate base the cost of the most efficient agency, water carrier costs will be fundamental for such types of traffic. Cost trends of water carriers, however, have been rising sharply. Stevedoring costs have already been mentioned. Seamen's wages have likewise increased rapidly. Although greater efficiency may be developed, particularly in loading and discharging operations, it appears at present that postwar labor costs will remain higher than they were before the war. Fuel expenses have also risen substantially, although they may decline again, and in part will be offset by the use of more efficient ships. Ship purchase costs, however, will undoubtedly be substantially higher. Many of the vessels operating in the domestic trades before the war were purchased from the old Shipping Board at extremely low prices. At the time this paper is being written, a definite postwar ship sales

[3] Ralph L. Dewey, ***The Long and Short Haul Principle of Rate Regulation*** (Ohio State University, 1935), pp. 260–261.

policy has not been formulated, although a Ship Sales bill has passed the House of Representatives and is currently being considered by the Senate. The House version provides for the sale of vessels to domestic operators at about 50 per cent of their prewar domestic construction cost less depreciation, which is intended to be roughly equivalent to their cost of construction abroad. This proposed policy presents some interesting problems. From the social point of view, the cost of the war-built fleet can be considered as a sunk cost, but by the same token the strategic importance of rail transportation would justify charging much of their construction costs to national defense. This reasoning has already been applied in some studies to the determination of the portion of highway construction and maintenance costs that should be allocated to commercial vehicles. Selling war-built vessels at their approximate foreign cost of construction, however, appears to be a fairly satisfactory compromise; because if domestic ship operators were required to pay the exceedingly high American shipyard prices, they probably could not afford to operate in the domestic services at all, while if they were sold for less, they would be given an unfair advantage over inland transportation. The estimated foreign construction cost may not be an ideal compromise, but it is an attempt to establish water transportation on a basis which is fair to the other agencies and will still permit ships to operate. Objections may be raised that purchasing at estimated foreign cost will give ship operators an unfair advantage, because they are protected by the coastwise restrictions from the competition of foreign ships. This, however, is a dubious privilege in view of the necessity of competing with inland carriers who have been permitted to charge rates that do not always cover their full allocated costs, and who can purchase equipment from American manufacturers who do not suffer the same comparative disadvantage as American shipbuilders. These coasting restrictions have also protected railroads and trucks from the competition of lowcost foreign shipping. In all fairness to inland transportation, however, import duties on rails, railway equipment, motor vehicles, etc. should be abolished; so that they, too, may have access to foreign markets whenever supplies can be purchased abroad more cheaply.

In cases, therefore, where common carrier water transportation is the low cost producer, the Interstate Commerce Commission will probably use these costs to establish the basic rate structure; and these costs, in turn, will probably be higher than before the war. Accordingly, water rates will have to be higher in order to be remunerative. This is especially apparent when one considers the cutthroat competition that existed in the intercoastal trade and the sorry financial condition of most domestic ocean-going common carriers before the war. On the basis of prewar rates, they were unable to provide adequate funds for vessel replace-

ment. On the other hand, these trades were overtonnaged as a result of the ship sales policy, or lack of one, of the Shipping Board. If these trades are not overtonnaged in the future, better utilization of the vessels should permit more remunerative operation even at the old rates; although it is still very doubtful that these would be reasonably compensatory with higher postwar operating costs and vessel prices. Tankers (and under certain conditions dry cargo tramps, contract, and even common carriers transporting only three or less bulk commodities without mark or count) are exempt from the Commission's jurisdiction. This may increase the share of the business transported by contract carriers and tramps at the expense of common carriers; but here, too, higher postwar costs will tend to raise rates, although perhaps not as much as the Commission would for common carriers. Such competition will confront the Commission with the problem of permitting common water carriers to charge rates on some bulk commodities that are competitive with contract carrier rates, although they may be below the full allocated cost of the regulated common carriers. Tanker rates will be determined, as before the war, in an unregulated market characterized by oligopoly and oligopsony. What competition will come from new pipe lines cannot yet be ascertained.

To what extent the Commission will permit higher cost inland agencies to meet low cost water transportation and to what extent common water carriers will be permitted to compete with the inland carriers for traffic for which the railroads are the low cost agency remains to be seen. It can be concluded, however, that water rates will probably have to be higher than before the war in order to cover increased operating and overhead costs; and for the water carriers to survive, competitive rail rates will have to include more than just enough to cover the extra or additional expenses incurred in handling the traffic to which it applies. We can hope that co-ordination will be "the attainment of such a compromise between monopoly and competition as will insure the continuance of essential agencies, maintain the maximum variety of services, eliminate undue waste, and preserve effective incentives to improvement."[4]

To accomplish this objective, it will be necessary to design accounting methods that will supplement those devised for managerial and financial purposes, in order that social and economic costs might be more clearly revealed. This might well require a considerable increase in accounting expenses, although it is possible that a judicious use of modern statistical sampling techniques will produce satisfactory results without occasioning excessive cost.

[4] G. Shorey Peterson, "Transport Co-ordination: Meaning and Purpose," *Journal of Political Economy*, Dec., 1930, p. 680.

DISCUSSION

G. Lloyd Wilson and Roland L. Kramer: Dr. Perry in his comprehensive treatment surveys the growth of the United States merchant fleet during the years of fevered construction to its present gigantic size of approximately 60,000,000 dead-weight tons—the largest merchant fleet ever assembled by any nation in history. The problems of using or disposing of this vast fleet are complex. That only a fraction of this tonnage will find profitable use in the future shipping trades of the United States is evident even to the casual student. Precisely what proportion can be expected to be so employed is probably anyone's guess. Professor Perry has estimated these over-all requirements—for foreign, coastwise, intercostal, noncontiguous, Great Lakes, and inland waterway trades—to be 12½ to 13 million tons of dry cargo vessels and 4 to 5½ million tons of tanker vessels. The grand total is 16½ to 18½ million tons deadweight—a maximum of 30 per cent of the present fleet.

Although one would hesitate to agree with Dr. Perry's comment that "no criticism can be made of the Maritime Commission for having constructed vessels which are not suitable for peacetime operations," one must bear in mind that the bulk of the war-built tonnage was constructed with maximum output and rapid construction in mind in order to offset as rapidly as possible the vessels lost by enemy sinkings and to add new tonnage for war purposes. The splendid record of the Maritime Commission in its prewar rehabilitation program should also be put in the balance of judgment. And yet it is tragic that in this war the United States should have repeated the experience of World War I and built a large fleet of vessels many of which are ill-suited for postwar operations. It raises the question as to whether these vessles can be considered as parts of a merchant fleet, since military and strategic service considerations shaped their production.

Further, the postwar tanker fleet is described as comprising modern, speedy tankers to the extent of 73 per cent of the fleet. If dry cargo vessels were hastily constructed under the exigencies of war, certainly tankers were subjected to the same pressure. In fact, 1942 and 1943 presented a most dismal outlook from the standpoint of tankers. Despite this urgency, modern tankers were built. Why not modern dry cargo vessels? Dr. Perry offers no explanation.

Dr. Perry appears to vacillate in his appraisal of the value of these vessels. He states that "American ship operators have at their disposal a large number of modern vessels" and that "the United States postwar dry cargo fleet will consist of many vessels which are not ideally suitable for commercial purposes," and that "the postwar fleet of preferred vessels contains an excess of certain types of vessels and a deficit of other types."

Finally, his general conclusion is that "a very large proportion of the active United States merchant fleet will consist of modern types of vessels especially designed for the trades in which they operate." Despite these contradictory generalizations, it is apparent from this analysis that while

postwar United States has now a large merchant marine, a considerable percentage of the war-built vessels will be unusable for postwar commercial operations. No adequate reasons except that of the need for speed in construction are offered for the failure to build in wartime more vessels which are usable in commercial operations and less which are inept for commercial operations. It is possible that military and naval considerations may have influenced design, and if so, is it impracticable to more nearly harmonize military and commercial requirements? Could not more of the C types have been constructed during the war and greater emphasis placed upon the expediting of building these types rather than the construction of so many "floating white elephants"? It may well be that the answer to this query is an emphatic negative, but the question persists.

Dr. Perry states that many Victory type vessels will be placed in the reserve fleet and that virtually none of the Liberty vessels will be kept in operation. "Not a single American flag line operator has yet contracted to purchase a single Liberty type vessel and few American operators have indicated their intention of so doing."

In describing wartime merchant vessel operation the writer refers to the operation by private operators as agents of vessels acquired by the government, and asserts that "such a system achieved the dual purpose of centralized public supervision and private operation." That this method along with the Ship Warrants Act fortified and extended public supervision and control is undeniable, but it is suggested that the author elaborate on this subject in order to demonstrate more adequately that it is tantamount to private operation. It protects private operators against the losses incident to war operation and retains the operating experience of the shipping companies, but does it not lack many of the elements of genuine private operation?

Another point which it is suggested requires clarification is the relationship between and the relative functions of the Combined Shipping Adjustment Board and the United Maritime Authority. Dr. Perry states that U.M.A. "does not displace the Shipping Adjustment Boards: it is merely a supplementary organization." In what ways does this organization supplement the Adjustment Boards? How is it intended to function with respect to United Maritime Authority in the postwar period?

The author states that the United States is committed to private ownership and operation of shipping and that wartime public controls will be abandoned. He offers, however, no explanation of the large public interest in overseas ocean shipping before the war, nor does he indicate how adequate private capital will be attracted to American flag overseas shipping. Does this not depend upon the unanswerable questions of postwar shipping subsidy policy, postwar construction and operating costs, taxes, and other questions as yet unsettled?

One is puzzled by Dr. Perry's conclusions that "liners will carry a larger percentage of tramp cargo" than before World War II. It may well be true that this conclusion is correct, but what are "the definite indications" mentioned by Dr. Perry upon which this conclusion is based? More evidence

also is desirable to support his conclusion that United States merchant vessels will carry 40 per cent of the total postwar dry cargo foreign commerce.

In presenting these estimates, brief mention is made of the role of tramp shipping under the American flag. At one stage of the discussions on shipping policy, Admiral E. S. Land, former Chairman of the Maritime Commission, asserted that tramp shipping under the American flag was expected to be an important factor in the postwar world. This type of operation, as Professor Perry indicates, would afford employment for the Liberties and the Victories. In view of the heavy, bulky nature of United States import trade, particularly from areas of the world outside of Europe, perhaps a larger use may be found for the Liberties and Victories than Professor Perry has indicated. This subject is worth further exploration.

Another important factor inherent in an estimate of the fleet required for postwar operation is one to which Dr. Perry alludes but fails to apply. This is the factor of ship performance. If vessels with greater stowage capacity and faster turnaround are to operate in the future, then some reduction in the number of ships required is to be expected. For example, Dr. Perry states that the present tanker fleet is 235 per cent greater than prewar. The modern portion of this fleet is 150 per cent above prewar, but in "considering the increase in the speed of the modern tanker fleet" this 150 per cent increase grows to an effective 175 per cent. Whether or not this factor of performance is calculated in connection with his estimates for dry cargo vessels as well as for tankers is not clear.

In appraising postwar requirements of passenger vessels for overseas operation it is suggested that the preferences of American travelers, who up to this time have created the demand for tourist space, must be appraised. Prior to the war many American travelers to and from Europe indicated this by their patronage of foreign flag services. Will this preference continue in the postwar period? Will it be an important factor in determining postwar passenger vessel requirements? A dogmatic answer to these questions is impossible, but it is equally dangerous to estimate requirements without considering them.

A serious omission in his appraisal of postwar coastwise and intercoastal shipping requirements is the matter of relative freight rates by all-rail, rail-water, and all-water routes. Dr. Perry states, "Certainly, the competition of land transportation agencies cannot be more severe during the postwar period than it was before the war." But it may be, particularly if heavier carloadings by rail keep certain railroad freight rates below normal levels and if steamship operating costs and rates are higher relative to railroad costs and rates than they were before World War II. Is not the reluctance of coastwise and intercoastal steamship operators to re-establish services upon normal commercial bases some evidence that these considerations may not be important?

It is more difficult to criticize Dr. Perry's valuable and painstaking estimates of vessel tonnage required in the various trades than it is to question the adequacy of the estimates in the absence of more enlightening data

upon questions of postwar policy. The policies of the United States with respect to the encouragement of United States operators engaging in tramp trade and the subsidies to be paid American flag operators based upon relative construction and operating costs, and countervailing subsidies, are not yet sufficiently clear in this writer's mind to warrant more than the most shadowy estimates. In connection with the cost of acquiring tonnage to be operated under the American flag, Professor Perry ignores the provision of the Ship Disposal Bill whereby war-built tonnage will be available at bargain prices. Since a part—and perhaps the larger part—of the postwar fleet to be operated in the foreign trades will be drawn from the war-built tonnage, the cost disadvantage from the standpoint of capital costs will be partially or perhaps wholly offset.

The policy of the United States Government with respect to the number of companies, the number of services and planes, the routes, and the amount of competition in international air line operations is unclear, and all of these affect overseas shipping, and to a lesser extent domestic shipping, particularly passenger service. The relationship to be allowed between steamship companies and airlines is unsettled policy and may remain so for some time to come.

If further complications are needed, how is it possible to reach any satisfactory conclusions, even with a generous margin of error, without taking into account the objectives and policies of foreign countries which also have ambitions and aspirations to operate strong overseas shipping services? Many of these countries desire merchant fleets to serve as military and naval auxiliary vessels as keenly as does the United States. They, too, wish a merchant marine adequate to serve their foreign trade. The United States is interested in developing foreign trade with these countries and it is quite probable that their aspirations and ours must and will be considered in the broader framework of international trade and international relations.

Arthur Wubnig: Mr. Deimel's basic theme is the need for reconciling the merchant marine with the foreign trade policy of the United States. As he stresses, this is largely a problem of the international balance of payments. We are aiming to maximize a two-way flow of commerce between the United States and the rest of the world. We are also aiming to transport in our own ships a much increased share of the ocean traffic to and from United States ports. But in proportion as foreign countries have less income from shipping, they will have less power to purchase our goods and to service their debts. If we force the intent of the Merchant Marine Act of 1936 beyond certain limits, we do so at the risk of thwarting reciprocal trade agreements, Export-Import Bank loans, Bretton Woods financing, and other aids toward multilateral world trade.

Despite Mr. Deimel's clear statement of the potential conflict between our shipping and trade policies, I think that he understresses the importance to foreign countries of dollar exchange out of the ocean transport of cargo and passengers to and from the United States. Before the war, foreign vessels carried 70 to 75 per cent of the traffic. The net dollar exchange which

they thereby earned or saved averaged 7 to 8 per cent of the annual value of United States merchandise exports. Cargo alone contributed 5 to 6 per cent, while the rest came from passengers. The prewar ability of the rest of the world to buy United States goods was thus materially affected by the readiness of the United States to transport the bulk of her ocean-borne commerce in foreign bottoms. If we insist on holding down to a minimum the postwar quota of foreign ships in our exports, imports, and passenger traffic, serious consequences will ensue for all of the countries which trade with us. There will be: (1) direct losses of purchasing power by maritime countries, such as the United Kingdom, France, the Netherlands, Norway, Greece, Denmark, Italy, and Sweden so far as their command over dollar balances may stem from the transport of cargo and passengers to and from the United States; and (2) indirect losses of purchasing power by non-maritime countries so far as their ability to effect dollar payments to the United States may stem from the export balances of their merchandise trade with countries which do operate merchant fleets, particularly the United Kingdom and France.

Let me try to assess the approximate sums at issue. From 1934 through 1939, according to the Bureau of Foreign and Domestic Commerce, the net foreign exchange earned or saved by the outside world from participating in United States cargo traffic averaged 150 to 155 million dollars a year. Adding 50 million dollars from passenger traffic, approximately 200 millions a year became available to foreign countries for the purchase of our goods. Writing the figures up to allow for the intervening increase in ocean freights and fares, we have perhaps 250 to 300 million dollars per annum of current purchasing power. These were the prewar stakes. The postwar stakes are apt to be much larger—perhaps several times as large—owing to multiplied exports and imports together with the resurgence of tourist traffic.

We are thus talking of hundreds of millions of dollars a year. Sums as great as these are of vital concern to the rest of the world regardless of how they compare with United States national income as a whole. The day is bound to come when the world at large will have to face up to the hard necessity of obtaining by the sale of goods and services alone the wherewithal to effect huge, continuing transfers of dollar exchange. Eventually, the ample dollar balances which are now becoming available out of reconstruction loans, UNRRA aid, the International Monetary Fund, etc. will all be depleted. It will then become necessary to exploit to the hilt every source of dollar income from current goods and services. Because each dollar counts, the apportionment of shipping revenues between United States and foreign carriers is a vital issue. It matters profoundly to the economic welfare of the world at large, I submit, whether foreign carriers obtain 70 to 75 per cent of the traffic, the prewar ratio, or 50 per cent, the apparent goal of existing United States policy.

What are my reasons for believing that the outside world will be hard pressed to obtain dollar exchange over an indefinite period following the exhaustion of the current supply of funds for relief and reconstruction? In abstract economic logic, a creditor country like the United States ought

to incur unfavorable balances in her merchandise trade with foreign countries as a whole; e.g., British, French, and Dutch experience down to the outbreak of World War II. But I fail to see how United States merchandise trade is likely to yield import balances in the discernible future short of a complete revolution in our tariff policy. Some lowering of duties, perhaps substantial, will admittedly ensue from reciprocal trade agreements. But the American people do not appear disposed to renounce the principle of protective tariffs as such. So long as we stick to it, the value of our merchandise exports should continue to surpass considerably that of our merchandise imports. This seems to me inevitable considering how productive resources are distributed between the United States and the rest of the world.

Before the war, as you may recall, exports of United States merchandise averaged 3.2 billion dollars a year as compared with imports for consumption of 2.5 billions. The net annual export balance was thus 700 million dollars, equal to perhaps a billion dollars as reckoned in 1946 commodity prices. Even if the gap narrows considerably, following the huge export surpluses on account of relief and reconstruction in the next few years, our commodity trade should eventually settle down to yielding a plus value of several hundred million dollars per annum.

Foreign countries will also be carrying a heavy burden of long-term debt to the United States. This may measure anywhere from 15 billion to 20 billion dollars counting Export-Import Bank loans, lend-lease write offs, credits for the acquisition of military surpluses abroad, special financial agreements such as that with the British, and the United States share of reconstruction loans via the Bretton Woods mechanism. The service of the debt will require additional hundreds of millions a year depending on the total obligation, interest rates, amortization schedules, possible waivers of interest, etc.

Although I set forth the figure as a mere order of probable magnitude, it seems reasonable to me to expect that foreign countries will have to lay hands on upward from a billion dollars per annum in order to cover their merchandise balances and service their debts. They will have to get it (if procurable at all) from shipping services, tourists' expenditures, and immigrants' remittances as the main sources.

That is why I must dissent from the seeming disposition on the part of the national shipping authorities to claim a predetermined share of our overseas exports, imports, and passenger traffic as the rightful quota of the United States merchant marine. The attitude I have in mind comes out clearly in a recent report on essential trade routes by the Postwar Planning Committee of the United States Maritime Commission.

Along each and every essential route, it is argued, the necessary tonnage of United States flag services should be defined in terms of a target of 50 per cent of the probable traffic or the prewar ratio if larger than 50 per cent. To keep the resulting fleet reasonably active might or not require rate wars, special subsidies, flag discrimination, quota fixing, etc. I leave these questions to specialists in traffic promotion. The underlying idea, in any event,

is to divert cargo and passengers from foreign vessels to United States craft; to increase the United States cut of traffic revenues at the expense of the foreign take. This strikes me as mistaken if we seriously intend to promote a maximum of two-way commerce between the United States and the rest of the world. It amounts to imposing an upper limit upon the permissable or realizable dollar income of foreign merchant fleets. It thus hits hard against an important source out of which the rest of the world may hope to obtain dollar exchange in the postreconstruction era to come. Its realization would thereby tend to impair the continuing ability of the outside world to buy our goods and repay their debts.

The United States would be ill-advised, I submit, to initiate a fifty-fifty rule even in the sense of a goal which defines tonnage requirements if not that of a rigid quota enforceable by law. The very idea of fifty-fifty expresses pure and simple bilateralism of the kind that brought so much economic grief to the world in the thirties. No country can claim it on behalf of her own shipping without admitting the equal right of all other countries to assert it on behalf of theirs. Ultimately, the fifty-fifty rule implies a state of affairs such that national vessels carry half and foreign craft half of the cargo and passengers moving in the ocean-borne foreign commerce of each and every nation which sees fit to operate a merchant marine. If the practice came to prevail the world over (as it well might through retaliation and counterretaliation against measures initiated by the United States) greatly increased transport costs would be bound to follow from the impact of payload, trip-frequency, and vessel-routing factors. Burdening ocean-borne merchandise with higher shipping costs is hardly one of the most effective steps toward a maximum of multilateral world trade. Equally or more important, the widespread practice of fifty-fifty would be fatal to freight services between exporting and importing countries by the merchant vessels of third countries. A catastrophe of the first order would thus break upon the national economies of the United Kingdom, Norway, Greece, and the Netherlands in particular. Each draws a considerably larger fraction of her national income out of shipping than does the United States. Much or most of that shipping is ordinarily engaged in indirect carrying trade as the common phrase puts it; i.e., the transport of freight between outside countries.

I might nevertheless concur with the idea of trying to get half of the traffic for our own ships were it at all arguable that the exigencies of national defense so dicated. There can be no question any longer that the United States merchant marine is an essential, precious tool of war. As such, we must keep it fit for future service by whatever means we may be obliged to use. All of the subsidies for the promotion of shipping and shipbuilding since World War I were amply repaid by the accomplishments of the deep-sea fleet in transporting men and arms during World War II. None of us, I feel certain, would quarrel with measures for maintaining or improving the merchant marine as an instrument of national defense regardless of how they affected world trade.

But are we likely to fail to have a merchant marine commensurate with security needs unless United States vessels carry half the traffic along each

essential route of United States foreign trade? I doubt this very much. I doubt it because it seems to me that if the existing setup of subsidies, privileges, and exemptions cannot do the job, then no means exist under private enterprise of getting and keeping a deep-sea fleet which shall be fit for service as a tool of war.

Let me remind you that, under the Merchant Marine Act of 1936, the qualifying operator of deep-sea vessels in essential foreign trade:

1. Can acquire new, modern ships, thanks to construction-differential subsidies, at a purchase price which approximates the costs of constructing comparable craft in shipyards abroad.

2. Can run his ships, thanks to operating-differential subsidies, at no more expense for wages, fuel, supplies, etc., than incurred by competing vessels of foreign registry.

3. Is exempt from federal income taxes, including the normal corporate tax, so far as his earnings from subsidized operations are utilized for retiring vessel debt, replacing obsolete craft, adding to the fleet, and kindred purposes.

4. Needs pay down only a small fraction of the purchase price of new ships, financing the balance, if necessary, by long-term, low-interest loans from the United States Maritime Commission.

Let me also remind you that by virtue of the ship disposal legislation now pending for final enactment: (1) United States operators will have priority over foreign operators in the acquisition of vessels from the government's wartime fleet; (2) these vessels will be purchasable at prices which eliminate all wartime inflation (i.e., for freighters, 50 to 55 per cent of the *prewar* costs of building comparable craft; for tankers, 75 to 100 per cent); and that (3) although foreign operators can acquire the ships by purchase only, United States operators can acquire them via charter and trade-in privileges as well.

As an additional guarantee that the merchant marine will be adequate for security purposes, there is the unconditional monopoly of coastwise and intercoastal shipping in favor of United States vessels. This class of traffic gave employment to two-thirds of the prewar active fleet. The bulk of the ships which engage in it are interchangeable with vessels operating in overseas trade.

The total picture, as I visualize it, shapes up more or less as follows:

The deep-sea fleet, now or recently active under the operating control of War Shipping Administration, aggregates 45 million deadweight tons. After our men abroad have all been brought home, it is intended to try to keep running in United States flag services roughly 15 million tons, or almost twice the prewar active fleet of 9 million. Perhaps two-fifths or more will be assigned to overseas routes; perhaps three-fifths or less to coastwise and intercoastal traffic. The great bulk of the vessels will be new, efficient units representing the best among the many thousand craft which poured out of American shipyards during the war. So far as their operating costs in essential foreign trade may exceed those of competing foreign ships (mainly because of higher wage scales aboard United States craft) the entire difference will be made good by operating differential subsidies. To the extent

that they may need to be replaced in essential foreign trade by more modern vessels, construction-differential subsidies will allow United States operators to get the necessary replacements at home as cheaply as foreign competitors can get them from shipyards abroad. Over and above 15 million deadweight tons in the contemplated active fleet, it is intended to lay up a national defense reserve of approximately 20 million tons. This reserve will consist mainly of Liberty ships; i.e., the earlier, less efficient units from the wartime mass production program. Adding 15 million deadweight tons in active service to 20 million in lay-up, it is proposed to make available only 10 million tons as a maximum for transfer by sale to Great Britain, Norway, Greece, the Netherlands, France, and other foreign countries which may wish to acquire our ships. From 1939 through 1945, however, the world's ocean-going fleet apart from United States vessels diminished by a third, or roughly 22 million deadweight tons. The surplus vessels to be offered to our Allies would thus make good less than half the nominal transport capacity of non-United States losses since the start of World War II.

It seems to me an obvious inference from the foregoing that the United States might be better advised to consider ways and means of helping our Allies restore their merchant fleets than ways and means of assuring that a predetermined minimum of ocean traffic shall move in our own ships. I have in mind, e.g., the possibility of making large amounts of additional tonnage available to the rest of the world by a United States decision to operate very much less than 15 million tons, to lay up very much less than 20 million tons, or better still, to do both. I wonder whether considerations of national defense or those of commercial profit and loss have been decisive in fixing the contemplated dimensions of the fleet to remain under United States control? I wonder whether the economic recovery of the world as a whole might not be accelerated if more of our country's abundance of ocean-going ships were utilized at once for replenishing foreign merchant fleets? I wonder whether our concern with multilateral world trade should not commit us to operating no more active ships and laying up no more reserve craft than demonstrably indispensable to security?

Apart from other considerations, the optimum use of productive resources calls out for a large-scale transfer of United States ships to foreign merchant fleets. American shipyards delivered new craft so prodigiously in the service of the war effort (approximately 48 million deadweight tons through mid-1945) that the world fleet today adds up to 20 per cent more capacity than before the war—roughly 95 as compared with 80 million deadweight tons, counting laid-up as well as active ships, obsolete or damaged as well as usable craft, and merchant vessels in military as well as civilian service. As the traffic experts argue, the world may well be coming out of the war with a heavy surplus of sea-going merchant vessels over realistically conceivable transport needs. Of the entire world fleet, however, perhaps three-fifths is concentrated in United States ownership, public or private, civilian or military, running United States or foreign flag. Our prewar share was only 15 per cent.

Understandably, therefore, our Allies and cobelligerents intend to build

up their own tonnage as fast as they can to prewar dimensions or beyond. The existence of a world surplus concentrated in United States ownership will hardly deter them, for each country feels obliged to pursue its own welfare as a separate national entity. Great Britain, e.g., owns 20 to 25 per cent less tonnage than before the war; the net losses of the Netherlands and Norway approximate 40 per cent; those of France, 55 to 60 per cent; of Greece, 65 per cent; and of Italy, 90 per cent. Reparations from Germany and Japan cannot help much, for their surviving fleets aggregate less than 4 million deadweight tons, of which an indeterminable proportion will have to be retained in coastal service.

It should not be hard to sympathize with the motives of the foreign countries which wish to restore their merchant fleets. If shipping income adds insignificantly to the power of the United States to command goods and services from the rest of the world, it is a major component elsewhere, particularly among those of our Allies who have to import more merchandise by value than they can export. From 1935 through 1938, as calculable from League of Nations data in *Balance of Payments, 1938*, foreign exchange out of merchant shipping minus vessel expenses abroad averaged 36 per cent of the annual import balance for the Netherlands, 30 per cent for Norway, 27 per cent for the United Kingdom, 18 per cent for Greece, and 15 per cent for France. Other countries as well as our own have the capacity to build ships—capacity in the sense of construction facilities, experienced manpower, and technical skills. We are by no means the only nation with a strong policy of subsidies, privileges, and exemptions in favor of shipping. Just as we argue that a big merchant fleet is essential to United States security, so do foreign countries regard it as vital to their own. In short, sterilization of useful ships by the United States is bound to engender procreation of unnecessary craft abroad.

The United States thus faces the alternative of transferring much of her surplus tonnage to foreign countries or having them undertake the construction of equivalent tonnage in their own shipyards. If we insist on holding on tight to what we have, shipbuilding programs abroad will be greatly accelerated.

This would be a gross waste of men, materials, and equipment. Reconstruction needs for other purposes are so urgent that the war-damaged nations ought to refrain as much as possible from the use of productive resources for shipbuilding. Further large additions to the world's ocean-going tonnage will only increase the potential surplus, and thus point the way toward a world-wide collapse of the shipping industry. I am convinced, therefore, that our ship transfer policy needs to be greatly liberalized. We should be offering more ships to our Allies. We should be offering them on terms—including charter and trade-in as alternatives to purchase—such as make their acquisition economically attractive. But in liberalizing our ship transfer policy, we should also try to gear it into our labor policy. I have in mind the expediency of making all transfers to foreign operation conditional upon full compliance with the various international labor conventions governing employment aboard merchant vessels to which the United States now subscribes or may hereafter adhere.

It will not be enough merely to help our Allies restore the tonnage they lost in the common fight against the Axis Powers. We must also help them keep their merchant fleets usefully employed in the service of multilateral world trade. I do not urge a counsel of perfection; e.g., positive steps to assure that foreign vessels have cargo and passengers to and from United States ports. I merely suggest a precept of practical wisdom; e.g., self-restraint in asserting United States claims against the quantum of ocean-borne commerce. We are asserting harmful claims, I submit, when we compel foreign countries to transport in United States vessels all, the bulk, or any fixed part of the merchandise they buy here out of the proceeds of United States Government loans for reconstruction purposes. The immediate effects are serious enough—for the borrowing country is forced to divert precious dollar exchange from the purchase of materials, supplies, and equipment which she cannot obtain elsewhere to the hire of shipping services which she is capable of performing for herself. But the ultimate damage may be still worse; e.g., a world-wide tendency to stake out monopolies on behalf of the national merchant marine, widespread recourse to fifty-fifty rules and other forms of shipping bilateralism, and economic disaster for merchant marines which have to get much or most of their revenues from the indirect carrying trade. Perhaps the existing laws need to be amended; perhaps only the spirit in which the national shipping authorities are applying them. Be this as it may, I believe that we ought to refrain from any and all traffic-grabbing measures. As a tool of national defense, the United States merchant marine is already amply safeguarded by construction subsidies, operating subsidies, tax exemptions, financial facilities, ship disposal privileges, and the monopoly of coastal trade. Our vessel operators can acquire and run deep-sea ships at much the same costs which their foreign competitors have to bear. They require no further cushioning against the impact of the higher wage scales payable to American than to foreign shipyard workers and merchant seamen. Increased world trade should by itself afford employment to a larger United States fleet than used to operate before the war. The diversion of part of the traffic which formerly moved in Japanese and German bottoms may also help appreciably. The outside world is in dire need of every dollar it can earn or save through the deep-sea transport of cargo and passengers. If we block off the opportunities for acquiring and conserving dollar exchange via major sources such as ocean shipping, we shall be doing so at the expense of the economic welfare of the world as a whole.

Robert H. Patchin: Dr. Deimel's paper is thoughtful and interesting, but this is no more than I expected from his knowledge of the shipping problem. It is difficult to do justice, even to a few aspects of the problem, in the short time alloted to me.

Mr. Deimel has alluded to the international balance of payments and the part of the net shipping earnings of foreign vessels engaged in American foreign trade. Mr. Deimel does not attempt to measure the net shipping earnings, but Mr. Arthur Wubnig, in his paper, places the dollar exchange derived by foreign shipping from carrying about 75 per cent of our foreign

commerce at a much higher figure than I can go along with. He says that the dollars earned or saved by foreign shipping in the carriage of such cargo amounted, from 1934 through 1939, to about 5 per cent of the average value of our exports during that period, and that if the exchange earned from passengers is added the total would be between 7 and 8 per cent. I believe this gives a very mistaken view of the true situation.

The estimate is based on dollar exchange "earned or saved" by foreign shipping and the Department of Commerce figures on which it is based apparently are also derived from the same formula rather than from the actual net balance of shipping earnings.

For a long time certain foreign shipping interests and some persons in the United States have contended that the United States cannot afford to maintain a much larger merchant marine because its expansion would deprive foreign maritime countries of a large part of their buying power for American merchandise and our exports would suffer accordingly.

In 1944 we undertook to analyze this contention. Comprehensive information on the balance of international payments of the United States is that compiled by the Department of Commerce. Its publication, *The United States in the World Economy*, published in 1943, contained a breakdown of the balance of international payments and receipts for many years between World War I and World War II. This showed that the net balance of shipping earnings, i.e., the difference between payments and receipts, from 1919 to 1938 inclusive, averaged about 35 million dollars annually, or less than 1 per cent of the average value of our exports in that period. This was an average figure; in some years the balance in favor of foreign shipping was substantially higher; in others it was even lower.

The sole purpose of our inquiry was to determine the extent of foreign buying power derived from their shipping services to us; i.e., dollar exchange derived from earnings of foreign shipping in the carriage of American foreign commerce. It did not relate to "earned or saved." In fact this definition has only recently appeared.

We went on to make an estimate of how much export trade theoretically would have been lost had American shipping succeeded in the year 1937 in carrying 60 per cent of this country's foreign trade. This was an extreme assumption but 60 per cent is no higher than the percentage which some foreign merchant fleets have attained in the carriage of their own national foreign commerce. This computation indicated that the dollar exchange which foreign shipping would thus have lost might have diminished their purchases of our exports by a little more than 3 per cent—this in a year of unusually high shipping earnings.

The conclusion drawn that from 1919 to 1938, inclusive, that net shipping earnings of foreign shipping in our overseas commerce averaged only about 1 per cent of the value of our exports has not been accepted by some members of the staff of the Department of Commerce and recently an article in the *Foreign Commerce Weekly* has undertaken to demonstrate that this was not the true measure of the stake foreign shipping had in carrying our commerce. This article assumed that the United States might have carried

all of our American foreign commerce and has worked back from that to a conclusion that foreign countries actually "earned or saved" dollar exchange amounting to about 5 per cent of the average value of our exports. It seems to me this is an unrealistic basis and assumption.

This computation or estimate fails, in my opinion, to refute the conclusion that the net dollar exchange available to foreign shipping after deducting port expenses and the countervailing payments to American shipping in the period 1919–38 in trade with the United States was a minute part of the value of our exports. It seems reasonable to conclude that any seriously proposed or probable increase in the merchant marine would not materially affect our export trade. In fact, as I will seek later to show, the trade-encouraging services of more American ships appear necessary to the expansion of our commerce. The prewar American merchant fleet was inadequate either for commerce or defense.

No maritime nation can carry 100 per cent of its own foreign commerce under modern conditions. But if a more realistic assumption were taken, say that American shipping had carried 50 per cent of our commerce, then there would be no balance either way. Obviously what foreign shipping would then have lost as compared with what it actually earned would have been about 1 per cent on the average of the value of our exports.

I realize that the computation of international payments and receipts is a rather intricate affair but whatever the result the dollar exchange earned by foreign shipping in our trade is far less than has been implied by those who have argued that we cannot afford to expand our merchant marine because of the disastrous effect on our export trade.

Before we go further into the question of merchant marine policy and economies, let us first stop and take our bearings. Discussion of the future of the merchant marine and of the desirability of various policies which have been urged on us will be at sea in a double sense unless we get our guiding marks, our instructions, and our loyalties straight before we start. First, it will be generally agreed that the main concern of our government should not be the building up or support of foreign nations but the protection and promotion of the defense and well-being of the United States, and this includes a liberal foreign policy reflecting our enlarged political and economic responsibilities in the world.

If aid to foreign nations serves our best interest, then that aid is justified, but as a matter of public policy any aid which is given primarily as a matter of relief is better undertaken by loans or direct gifts rather than by putting some American industry in a straight jacket and obligating this country to the perpetual support of some privileged foreign business interest. Second, our government should never adopt policies, at home or abroad, except under the compelling urge of national defense, that would tend to favor one class of Americans over another class or one type of industry over another.

Mr. Wubnig has stated in presenting his paper that he is in general agreement with Mr. Deimel and will use Mr. Deimel's paper as a springboard, but he goes far beyond what I understand Mr. Deimel to advocate. The

restrictions which Mr. Wubnig would place upon the development of American shipping and the aid which he would give to foreign shipping in the way of selling our war-built ships to them and even chartering ships to them would, in my opinion, set us even back to the position which we occupied before World War II. This would be an inadequacy of merchant shipping against which Admiral King and others have warned us. Mr. Wubnig admits we ought to have enough merchant shipping for our national defense, but he obviously thinks this should be ground down to a minimum and it would represent far less a development than Congress legislatively has provided for in the Merchant Marine Act.

Let me point out that such retreat and vacillation in policy would be a repetition of the indecision which has impeded sound merchant marine development in the past. To restrict merchant shipping so that foreign interests may have even more dollar exchange from carriage of our commerce than the 75 per cent they now enjoy so that they may better pay interest on large loans hereafter to be made is incongruous.

Mr. Wubnig implies somebody is seeking to enforce a rule that American ships should carry 50 per cent of the trade on every essential trade route in our foreign commerce. This cannot be fairly hung around the neck of the Maritime Commission or the shipping industry. Even today American ships carry even more than 50 per cent of the trade on certain routes and much less than that on others. Nobody can command a fifty-fifty division. Whatever is achieved will have to be won by good service, on equal terms, and this is what the Merchant Marine Act contemplates by the provision for payment of subsidies to offset the higher cost of building and operating American ships as compared with foreign vessels with which they actually compete.

Now I desire to underscore and briefly to elaborate Dr. Deimel's statement that the "maintenance of a positive policy of American shipping promotion is required by immediate considerations of national interest." He supports unhesitatingly and completely the value of an active American merchant marine and shipbuilding industry for defense but rather questions the value of national shipping in promotion of commerce. Although I have been told that economists generally doubt that American flag ships promote our trade more effectively than foreign ships, I will later cite some typical examples which I believe establish the superior value of American ships to American trade.

But first, as to defense, since ships cannot be instantly created, all great industrial nations except the United States have fostered and maintained their own merchant shipping in peace. Adam Smith exempted shipping from the application of his free trade doctrine on the ground that shipping was essential for national defense, and far from proposing that his country use the then cheaper Dutch vessels, he supported legislation which would have given Britain a monopoly on the tonnage employed in the British trades. John Stuart Mill and other liberal economists have also favored production and promotion of the national merchant marine, even when this

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involved some economic sacrifices. Economic theory on this matter has been borne out by economic experience. In two wars we have found the cost of *not* having maintained an adequate merchant marine in peace to have been staggering financially in war and we also have been in grave danger of defeat both times because we waited until war broke out to build up adequate shipping.

World War I was nearly lost because we did not have ships enough, first, to move the supplies to the Western allies before we got into the war, and then to move our own army and supplies. We spent some 3½ billion dollars on emergency shipbuilding, none of which was available until after the Armistice. However, the fact that it was coming on was one thing that convinced the Germans of the hopelessness of their struggle.

It has been estimated that the expenditure of 10 million dollars a year from the end of the Civil War to 1914 would have given us most of the tonnage we needed and it would have been available before 1917 instead of after the Armistice.

After World War I the decline in our tonnage, which we permitted through lack of definite and vigorous policy, was paralleled by a rise in the merchant fleets of the Axis aggressors.

When World War II broke out the Axis had greater maritime strength, I believe, than if we had kept up and had modernized our merchant fleet in the twenties instead of the late thirties. The older maritime nations seldom overbuild in time of peace or even in war. That appears to be our part. Moreover, a large amount of the shipping belonging to the Allies fell into Axis hands. Both General Marshall and Admiral King have stated that throughout the early part of the war shortage of merchant shipping gravely imperilled our country, and that it prevented our going on the offensive for months after we had built up the necessary military strength.

The reproach, "too little and too late," was due to our lack of ships. This the Axis had counted upon, thinking that while the United States would eventually come into the war it lacked the shipping to make its impact promptly effective before the Axis won. They nearly got away with it. Obviously we would not have operated in peace all of the vessels needed in this war. Therefore our expenditure of some 20 billion dollars on ships only could have been reduced in part by greater preparedness beforehand, but it is a fair assumption that the war would have been over sooner if we had maintained in time of peace a larger merchant marine. Our operations could have immediately got off to a running rather than to the actual standing start.

Could this war have been ended ***even one month*** sooner by our having maintained in peace a larger merchant marine, the saving in money expenditure on the war itself would have been 7 billion dollars, to say nothing of precious human lives, both military and civilian. Three months saved would have meant that much more saved of life and treasure.

But what is this defense—which so vitally requires ships? It is not merely defense of the United States; it is the defense of all the decent nations against aggressors. In the war just ended—if it is ended—it devolved

on the United States to build the ships, first, to make deliveries from the arsenal of democracy, and then, belatedly, to assure the impact of our armed forces both in Europe and Asia.

The United States was the one place where shipways were sufficiently secure to permit the building of such a vast fleet. You know what happened to Holland, France, Denmark, and Norway. Britain had neither the manpower, materials, or safe shipways for such a task; the keels would have been blasted as fast as laid. In another war *we* may not have the time nor the freedom from bombing to build another fleet here; hence the maintenance of a larger active merchant marine is required by every consideration of security for the kind of world we are seeking to create. You can lay up ships in reserve in every harbor and tidewater river of the United States, but you cannot lay up trained personnel.

If the merchant marine and Maritime Commission had not been for four years so completely engaged in helping to win the war, proof that American ships help American trade more than do foreign ships would have been well documented. Dr. Deimel thinks this claim rests on statements such as "trade follows the flag," and that American ships have prestige or advertising value, remain available in the event of war, and that national shipping provides more direct and better service than foreign vessels. However, there is much more evidence on this point than mere claims. For example, an American chemical manufacturer was unable to sell cyanide to gold mines in South Africa because the actual rates were higher from New York to South Africa than from the United Kingdom to South Africa, the same British company operating on both routes. When a direct American steamship service was established to South Africa it put in a competitive rate, and today there is a large movement of American cyanide to this particular market.

Prior to World War I when the Japanese were rebuilding the South Manchurian Railroad, the United States Steel Corporation was unable to get from foreign vessels competitive rates as compared with those from Europe. The late James A. Farrell, then in charge of the export business of the Steel Corporation and later its president, established a direct service from the United States to Manchuria, captured the contract for all of the steel (which the British thought they had in the bag), and made possible the placing in the United States all of the orders for locomotives, cars, and other railway equipment. This would not have been possible without direct service under control of the American shipper. It is true that the only ships which Mr. Farrell could obtain at the moment were foreign ships, but he had control of them and therefore was able to make a competitive freight rate. They were later all placed under the American flag, and the Isthmian Steam Ship Company, owned by the Steel Corporation, operates today the largest fleet of American-built dry cargo ships.

At the time of the British coal strike in 1926, British vessels still burning coal were so largely withdrawn from trade with the United States that cotton, wheat, and other agricultural products piled high on our docks in a manner reminiscent of 1914.

American steamship service, both passenger and freight, has been uninterrupted direct to the west coast of South America since the opening of the Panama Canal. The British line withdrew in the early thirties, and two South American lines suspended service in the period between the two wars, while a Danish line went out of business soon after the beginning of World War II.

A prominent Ohio steel man told me this week that when he first sought before World War I to bid on an attractive piece of steel business in Brazil he went to New York and sought a freight rate from one German and two British lines (there being no American service). He was told to return in three days, when the rate was identical from all three and so high a percentage of the value of the steel to be shipped that he lost the business.

A former freight traffic manager of one of our great railroads told me that before the American merchant marine was revived and began to operate in all important trades unusual inquiries for prospective United States exports to competitive markets had to be forwarded to Europe with all details before the freight rate was quoted and that when it was quoted it was often too high or too late. A former port official of New Orleans tells me that when New Orleans and the Mississippi Valley tributary thereto was wholly dependent on foreign ships to South America, service was infrequent and pleas for liner service were met with the excuse that "there is not enough business down there." This in a trade which has grown to large proportions and in which a fine American service has since been established and will shortly be restored to private American hands with improved passenger and freight vessels.

Before 1924 our rubber from Malaya came by foreign tramp, taking sixty to ninety days on the voyage. American vessels established liner service, taking thirty-eight days and with arrivals on definite schedule. Foreigners had to follow suit. At about the same time our lines also pioneered refrigerated service for United States fruits.

So well have American lines built up service and established competitive rates that only some five complaints that rates from Europe to competitive markets were lower than those from the United States have reportedly been received in the last eighteen years by the Maritime Commission. Contrast this with conditions prior to 1914, when complaints of this sort were perennial.

Dr. Deimel contrasts our national shipping policy with our international economic policy by characterizing the ship policy as one of "promotion," and the international policy as seeking to maintain and develop a system of liberal multilateral economic relations and the expansion of mutually beneficial commerce. He thinks there is a divergence between the two principles in their bearing on international economic relations.

I believe his characterization of the shipping policy as one of promotion is incomplete. At any rate it no more promotes American shipping than many of our other policies, such as the tariff, parity payments to agriculture, export subsidies, and maintenance of commodity prices, promote other segments of our economy. If Dr. Deimel had used the soothing word

"parity" instead of "promotion" he would have come closer to the fact and would have left less ground for supposed conflict. What he repeatedly describes as the "broader international economic policies of the United States" are, in fact, shot through with protection for various elements of our national economy and various classes of our industrial and agricultural population. The United States is pursuing no abstract philosophy in any of its policies and Dr. Deimel indicates this, but continues to stress a divergence and imply a conflict which he feels must be "harmoniously resolved without sacrifice of essentials on one part or the other."

This raises the question of how much actual conflict there is and whether we actually do have a special international economic policy which is broader or higher or more controlling than various other national policies. My own belief is that our international economic policy is the sum of all of our laws which bear upon our international relations, and that national shipping policy is a constituent element in, and not something apart from, our international economic policy.

In the light of our experience in two wars I can think of no broader or higher policy purpose than to develop the American merchant marine and keep it at a point adequate for both defense and commerce, which it distinctly was not prior to 1939.

Will Dr. Deimel say that the reciprocal trade agreement policy, which I have supported before Congress every time it has been up, is any less promotive of American exports than the Merchant Marine Act is of American shipping? Do not Export-Import Bank loans promote American exports? Is not the pending Anglo-American loan being advocated on the ground that it will open foreign commerce and lift from American export trade certain discriminations? To the extent that loans may not be repaid are they not subsidies?

Are the subsidy payments authorized by the Merchant Marine Act to overcome disadvantages imposed by our higher standard of living and United States navigation laws and requirements any greater aid to shipping than the tariff is to many lines of production even when the duties have been adjusted through the Reciprocal Trade Agreements Act? As a matter of fact, the United States before the war imported a far larger part of its shipping needs in foreign trade than it did of any largely used competitive product. Foreign ships carried nearly three-quarters of our foreign commerce.

It is interesting to consider what would be the public reaction were it proposed to create a condition of free competition under which three-quarters of our need for steel, automobiles, textiles, or farm products would be drawn from foreign sources or how long such a situation would be allowed to continue. I am seeking here to make the point that our shipping policy is no less liberal and no less in tune with the spirit of the times than other phases of our policy affecting international relations. Some foreign maritime interests, however, display a peculiar sensitivity to any increase in our exports of shipping services which they do not display towards increase of our exports of goods.

Nobody can object to suggestions that various parts of our national policy should be harmonized, but you do not promote the harmony of the human body by suppressing the functions of one of its component parts, and you are not likely to harmonize the body politic by a similar operation.

The percentage of our commerce carried by American ships is far less than that which British, Japanese, German, Italian, and other vessels carried of their total national commerce. We do not seek such dominance.

Dr. Deimel in urging the attainment of compatability between national shipping policy and the international economic policy, emphasizes that this problem relates only to the policy of merchant marine expansion through government aid "beyond the competitive commercial level." He says, "No question of restriction of national shipping activities on a commercial competitive basis is involved."

Since there is no authority anywhere for restriction of lawful steamship operation in foreign trade, this assurance seems a little superfluous, but it does imply that what he has in mind is some sort of a limitation or restraint upon the Merchant Marine Act. Since only moderate progress had been made under this Act when its operation was suspended in 1942 the question naturally arises whether under such a limitation it should be permitted again to operate to any substantial extent. I am aware that others in the State Department feel that subsidies should not be employed to expand the merchant marine beyond the point it occupied before World War II. This would be distinctly a reversion to the inadequacy which cost us so dear, and against which Admiral King and other of our war leaders have warned us. Any such ceiling or limitation would be a direct challenge to an act of Congress designed to remedy a basic defect in our national economy. A ceiling or limitation in the name of broader international economic policy which would let the merchant marine up only an inch or two at a time would equally frustrate the Congressional directive.

Missing from Dr. Deimel's paper—he naturally could not cover all points—is reference to the fact that many foreign governments substantially subsidize their shipping even though it does not suffer the higher costs and administrative restrictions which afflict the American merchant marine. Is there any assurance that other governments will cease to promote their national shipping? Even if they should they would not lose parity or advantage over us. It should be mentioned that subsidy payments under the Act of 1936 until suspended in 1942 were only 10 million dollars a year, more than half of which was subject to recapture.

What I feel should be established in this discussion is whether we actually have an overriding international economic policy to which shipping policy does any violence whatsoever.

A reading of the Merchant Marine Act will convince anyone that it is not a wide-open subsidy law. Subsidies may only be granted to ships whose operation on a route essential to the United States is guaranteed. They may not be paid to American vessels operating in world trade wholly foreign to the United States. Those who receive subsidy contracts assume heavy obligations to maintain service in good times or bad, build new and modern

ships as required, surrender the ship in time of war to the government at book value, and turn back to the government one-half of earnings over 10 per cent on capital actually invested. They receive some consideration in taxes but all in all they actually get something less than the parity the Merchant Act professes to extend. All of the advantages and some more an American citizen could obtain by operating under a foreign flag, but then the United States would not have the ship in the event of war.

The disparity in operating costs is in no small part due to requirements imposed upon American ship operation by the United States Government. When Dr. Deimel speaks of not interfering with the operation of American shipping on a commercially competitive level he overlooks the fact that the government *is* constantly interfering with and hampering the competitive ability of American shipping by requirements beyond those imposed upon efficient foreign ships by their governments. So if there is to be compatability between supposedly conflicting policies, let it prevail all around the circle before we abandon the equalizing aid which Congress has authorized.

Ralph H. Hallett: The paper of Dr. Marx can be divided into two parts: first, he outlines the factors and imponderables which will undoubtedly be at work in the future and which will have varying effects upon future freight rates, winding up with the conclusion that the probable excess of tonnage over demand will outweigh the increased cost of operation and will, therefore, cause a serious depression of the rate levels; second, he outlines the machinery by which he suggests that this undesirable result may be prevented.

Whether there will be a serious excess of tonnage over the demand will depend upon whether any maritime nation adopts a national policy of insisting upon securing a lion's share of the world traffic by any competitive device whatsoever and without regard to the claims of other nations.

However, there does not appear to be any evidence that any of the maritime nations, including the United States, intends to use its vessels to secure a lion's share of this international traffic. The fleet of the United States could be used for such a purpose, but every official in a position to express a considered opinion has stated that the fleet to be used in foreign commerce should only be sufficient to carry a substantial portion of the commerce of the United States, and "substantial" has been defined as approximately 50 per cent.

If the term "reserve fleet" means that the reserve fleet will be in a position to be used actively at any time, then it is possible that Dr. Marx's fear of excessive tonnage will materialize. However, in view of the experience which the United States had with respect to a reserve fleet after World War I, it is believed that the reserve fleet which will be laid up after this war will be forbidden to be used by act of Congress, except in extreme emergency. Should this be done, the vessels in this fleet could not exercise any effect upon the demand for tonnage.

Statements have been made by various English speakers and writers to the effect that England did not intend to make the mistake which it made

after World War I and dispose of its obsolete tonnage to the nationals of other countries, because it found that by so doing its active commercial fleet was handicapped by the competition thus created and its shipbuilding industry was handicapped by a lack of orders.

Unless the larger maritime nations ignore all experience there is little likelihood of there being such an excess of tonnage actually in operation over demand as Dr. Marx fears.

Dr. Marx finds a need for an international organization to: "(1) protect the shipping public against monopoly powers of shipping conferences; (2) help rationalize the economic forces of supply and demand . . . ; and (3) co-ordinate national maritime policies."

Even if an excess of tonnage over demand great enough to depress freight rates should develop, Dr. Marx has thrown doubt upon the soundness of his recommendation for the need of such organization to control it. He has outlined the formation and activities of the International Tanker Pool and the Tramp Shipping Administrative Committee. He states in connection with these organizations: "These pools mark something new under the sun and may well establish a precedent for international co-operation in rationalizing surplus tonnage in the future." He might also have included the Baltic and International Maritime Conference.

These organizations comprise nearly all owners of tramp vessels in all of the maritime nations in Europe, including England. Their co-operation was voluntary and so successful that they were functioning up to the time the war broke out in 1939. With respect to the control of freight rates of tramp tonnage, which, by the way, influence freight rates of liner vessels most seriously in times of depression, the precedent already established by these organizations evidences a probable ability to prevent any excessive effect from overtonnaging without intervention from the national or international level.

The need for an international control organization to control shipping does not appear.

Dr. Marx states: "Conference and pooling arrangements have had considerable success but have not been adequate to the over-all task which has confronted the industry."

Unfortunately, he has not pointed out the over-all task to which he refers nor in what way the conferences of either tramps or liners have failed to meet that task. He speaks a good deal of protecting the rights of the shipping public, and it may be that he feels that the conferences have failed in this respect. It is difficult to determine whether he disapproves of the result of the English investigations into shipping rings or conferences. He does seem to be impressed with the manner in which Australia met its problem of securing stable and a lower freight rate. The Australian problem was a simple one by reason of the comparatively small number of commodities involved.

It cannot be denied, however, that the English have investigated conferences very thoroughly. The fact that they found that the conferences were using deferred rebates, keeping the terms of their agreement secret, as

well as their tariff schedules, and did not condemn these practices is evidence that England believed that these practices were of more help in advancing the English foreign commerce than they were detrimental to the rights of the shippers. It is well to keep this English attitude in mind before deciding to place the control of conferences under an international organization.

The American attitude varies widely from that of the English. Conferences have been the subject of searching investigations since that of the Alexander Committee of Congress which started in 1912.

The need for the retention of conferences appears in every investigation, but many of the conferences' former practices have been condemned, such as the fighting ship, deferred rebates, and the secrecy of the agreement itself. The conference agreements were made public and subject to the approval of the regulatory agency before the parties could act thereunder lawfully. The Maritime Commission continually scrutinizes the activities of the conferences to assure that the rights of the shipping public are protected.

Dr. Marx has been misled by the only two formal decisions of the Commission and its predecessor covering rate filings into the belief that they include all filings which are required. This is not the fact. The Commission as an administrative matter requires all conferences to file their tariffs with it, inbound traffic as well as outbound. These tariffs are open to public inspection. These tariffs cover a large portion of the foreign transportation in and out of United States ports. The tariffs are not merely received for filing, but are studied to assure that the conference involved is protecting the rights of its customers. In addition, the Commission insists upon being furnished a full record of conference activities.

Dr. Marx has presented no evidence that what he calls the monopolistic tendencies have worked to the detriment of the shipping public. In view of the widely different approaches toward monopoly followed by the European countries, including England, on the one hand, and by the United States on the other, an international organization made up of the representatives of these countries would undoubtedly be forced to compromise these different approaches. Any compromise would certainly not increase the limitations imposed upon the practices of the conferences by the laws, rules, and regulations adopted by the United States.

The problem of passenger fares and the level which they will find in the postwar period will be dependent to great degree upon the development of the air service. In spite of the optimistic claims of some of the air companies that they will be able to attract all the passengers, the maritime industry is convinced that there will be a substantial travel by water which may exceed the prewar volume by reason of the timesaving airplane which will create a greater pool of possible travelers from which to draw. The fares of each service will be dependent upon those of the other.

The fact that the fares of the carriers by air may be controlled by an international agency does not mean that those of the carriers by water must also be controlled by the same agency. The fares applicable to United States ports in practically all cases are subject to conference control, which

in turn is subject to the supervision of the Maritime Commission.

It is believed that no resort should be had to international regulation by governments until it has been proven that no other regulation is adequate. Too often we believe that "pass a law" is the panacea to cure all our problems.

JOHN G. B. HUTCHINS: Professor Marx has presented an analysis of some of the economic forces and institutional arrangements which may be expected to influence postwar ocean freight rates. The paper deals, however, primarily with principles, and one might wish that he had applied these principles in a quantitative manner to the problem of postwar freights. He is, of course, on very sound ground in relating his analysis to broad questions of demand, supply, and merchant marine policy. His approach is, however, of a somewhat static nature, and in the speaker's opinion, does not adequately take account of the probability that during the next two or three decades the maritime industries of the world, given peace, will be engaged in a process of adjustment, quantitatively, geographically, and technically, from the present greatly distorted position to one which should reasonably well represent long-run equilibrium. In shipping, because of the normal twenty-five-year life period of vessels, this process of adjustment is generally tortuous, and engenders severe financial pressures. Furthermore, the navigation policies of the principal maritime powers are likely to interfere seriously with any trend toward a normal equilibrium. Therefore, the process is likely to involve several distinct stages and will doubtless exhibit cyclical fluctuations. It would appear, therefore, that such prospects should be taken into account in discussing postwar freights.

One problem which deserves considerable attention is the question of the trend of the differential between the United States and foreign countries in construction and operating costs. The recent Harvard study has presented data showing that before the war, for the C-2 type of ship, construction costs in the United States compared with Great Britain were in the ratio of 1.4 to 1, with respect to Germany, 2 to 1, and compared with Italy and Holland, 1.5 to 1.[1] Average wage rates in shipbuilding were also shown to bear ratios ranging from 2.4 to 1 for Britain to 5 to 1 for Italy.[2] With respect to ship operating costs, American owners faced substantially higher expenses on account of wages, subsistence, repairs, and insurance, of which the wage item was most significant. Able seamen on foreign ships were paid amounts ranging from 19 per cent of the $73 per month American wage in the case of the Japanese to about 65 per cent for the British.[3] In relation to total revenues, American operating costs were estimated by the Harvard group to have been before the war from 15 per cent to 20 per cent above foreign costs.

[1] *The Use and Disposition of Ships and Shipyards at the End of World War II. A Repor Prepared for the U. S. Navy Department and the U. S. Maritime Commission by the Graduate School of Business Administration, Harvard University* (Washington: Government Printing Office, June, 1945), p. 165. Hereafter referred to as the Harvard Report.
[2] Harvard Report, p. 165.
[3] Harvard Report, p. 62.

It seems probable that the long-run effect of World War II will be to widen these differentials. The war has greatly impoverished the maritime powers of Europe and has seriously damaged their export trades. When adjustments in foreign exchange rates to take account of distorted currencies and international monetary disequilibrium have been made, it seems likely that shipping will prove to be for such nations a relatively profitable business. It is true that in some cases, such as that of Greece, the loss of capital during the war may prove to have been so great as to prevent a rapid revival. In Great Britain, the Low Countries, Scandinavia, and perhaps also Italy, it seems likely, however, that sufficient capital and entrepreneurial talent will be available to permit of a rapid recovery. If the cost differentials are thus widened, we may expect intensified competition between the foreign maritime powers, which will be endeavoring to rebuild their fleets, and the high-cost, subsidized, American merchant marine. Such competition would doubtless place a severe strain on freight rates.

We may, therefore, hazard the prediction that there will be, as after the last war, four stages in the history of postwar shipping, assuming that peace is maintained. The first stage is the postwar reconversion period, through which we have already made much progress. It may be expected that these years will be characterized by extensive employment of tonnage in the movement and supply of troops and in relief shipments, the charges being largely paid by public agencies. As at present, no substantial surplus of vessels, even Liberty ships, may be expected to develop. Pressure on the available tonnage is, however, unlikely, as is evidenced by the fact that repairs are not being made to Liberty vessels which are in even moderately bad condition. During these months world traffic will be dominated by the high-cost, American, war-built merchant fleet. Intense competition from foreign vessels is not likely to be felt. Indeed, until March 2, 1946, the vessels of the principal maritime states remain under government requisition in accordance with the United Maritime Agreement. Thereafter for some time the revival of foreign owners' operations will continue to be hampered by shortages of labor, capital, and facilities, by the large volume of old tonnage now in a bad state of repair in such fleets, and by political and social disturbances. Foreign owners may be expected to shelter themselves under the umbrella of high freight rates largely determined by American costs, and even to press for a lifting of such rates. The rate structure, already swollen by wartime surcharges, may therefore be expected to survive with only piecemeal modification.

This first period will probably last until the present abnormal traffic movements subside and efficient foreign competition in volume reappears. After World War I, the corresponding years were from the Armistice to mid-1920. By the end of 1921, however, rates from United States Atlantic ports to Europe had declined sharply to 30 per cent of the January, 1920, rates. A similar collapse may be expected again.

Secondly, we may expect this first period to be followed by a time of reconstruction and readjustment. In the case of World War I, the comparable years were from 1920 to 1930. As Professor Marx points out, ocean traffic

may quite conceivably be substantial, but it is unlikely to approach in size the heavy movements of the war and reconversion periods. Furthermore, as a result of the elimination of inefficient military and relief traffic, and the improvement of ports in war areas, much of the inefficiency now affecting shipping will have disappeared, and the present volume of tonnage will be capable of carrying a larger amount of traffic. To give quantitative background, we may note the conclusion in the Harvard Report that annual postwar dry cargo traffic in American foreign trade will range between 48,000,000 and 67,000,000 cargo tons, compared with 28,000,000 tons in 1929, and 48,000,000 tons in 1937.[4] In view of world unsettlement, wide variations are possible.

On the supply side, there will doubtless be a rising volume of construction in the principal shipyards of Europe of modern, specialized, cargo liners, and of faster, more economical tramps. German and Japanese shipbuilding will probably be negligible, but this is not certain. Private incentives to build up tonnage will be unusually strong because of the expected large differential in costs, the rate umbrella, and the expected recovery of efficiency generally in European ship operations. Furthermore, the foreign exchange positions and national interests of the leading foreign powers will undoubtedly lead to policies designed to foster both shipping and shipbuilding. The expected decline in freight rates will in itself produce pressure to modernize fleets. Many old vessels having high costs will doubtless find their way into the hands of owners in the poor, low-wage maritime states in whose hands they will continue to compete. Even in this country, substantial construction of vessels of special design is planned under the terms of the Merchant Marine Act of 1936. A period of active world shipbuilding is therefore in prospect.

This process of rebuilding the world merchant fleet is certain to have serious implications for the level of freight rates. A substantial surplus of tonnage is inevitable, since the huge war-built fleet will not be overage for two decades. The Harvard Report, it may be noted, estimates that at best vessel employment in both protected and foreign trades of the United States will amount to about 1,035 dry cargo ships and 290 tankers, and at worst to 685 dry cargo ships and 175 tankers, compared with a total supply of close to 5,000 ships.[5]

The appearance of many new modern carriers is bound to lower the cost at the margin of providing service. Many vessels now operating, including much of the American wartime fleet, will pass beyond the margin. The owners of the new, efficient vessels may be expected, as in times past, to attempt to capitalize on their advantage by lowering rates. This may occur through pressure within conferences, by nonconference competition, and by tramp competition. American operators may, in general, be expected to resist such pressure vigorously. This period of steady pressure and of a shift in the center of gravity in merchant shipping abroad may, as Professor Marx has indicated, be protracted. Over the short run, the supply of ton-

[4] Harvard Report, p. 55.
[5] Harvard Report, p. 120.

nage is highly inelastic indeed. The result is that rates may fall far without causing the removal of ships from the freight market, except by government action. Operators may continue vessels in service even though revenues fall, not only to the point where they do not cover operating costs, but even further to the point to which the deficit in the operating account approximates the lay-up charge on the vessel. Even then, because of the cost of reconditioning ships, owners are reluctant to lay-up. There is accordingly a strong probability that in the absence of private and public controls a situation will arise favorable to a freight structure chronically below the normal equilibrium point. It is almost certain that the freight levels will be well below the average ton-mile cost of operating American war-built tonnage. American operators, unless subsidized, may have serious difficulties.

Professor Marx is aware of these possibilities and of some of the problems of control through international shipping conferences. He therefore urges the formation of a permanent world shipping authority to supervise private agreements and to deal with problems of rival public policies, which are beyond the reach of private firms. The present United Maritime Authority is such an organization. There is already, however, much impatience with its restrictions, and both operators and governments are clearly preparing for vigorous competition upon its expiration.

It may be pointed out, however, that such an organization would have great difficulty in controlling rates unless it had far-reaching powers to control supply. Otherwise a great waste of carrying capacity such as occurred between the World Wars is inevitable. In addition to controlling rates, such a new peacetime authority would therefore doubtless have to intervene extensively with respect to securing agreed allocations of liner sailings among flags, and would also probably have to control tramp sailings to some extent. The shares of the respective operators and nations in world traffic would have to be determined by a process of negotiation in which political and economic considerations would be intermixed. Temporary situations of this type have already arisen under the U.M.A. In these respects, maritime traffic, because of its complexity, is much more difficult to control than air traffic. The proposal therefore raises important questions. Would the ocean shipping system tend to become frozen? Would shippers lose many of the advantages of competition and flexibility? Would the dependence of shipping firms on government support become unduly great? Even more important is the question of whether or not subsidies would retain much significance as a means of extending national shipping interests? Finally, we may ask the most fundamental question of all; namely, do the rival security and national economic interests of the powers permit of reconciliation through such an authority? In general, however, the explosive forces in the freight market clearly point toward the desirability of some kind of international agreement.

It is theoretically possible to conceive of a third period, which would be one of acute crisis as a result of a culmination of shipbuilding programs at a time when World War II ships were still available, and of a world-wide

contraction in traffic. We may note that after World War I, there was such a period from 1930 to 1937. At that time, the revenues of even modern vessels operated by representative foreign firms were far from covering average costs, and less well-situated operators encountered serious financial difficulties. This was the period of the British tramp subsidies based on the concept of equalizing the difference between actual charter rates and "parity" rates. In Germany, Italy, and Japan, ship breaking was actively subsidized. Vessels generally sailed light, and there were numerous ballast voyages. Such a period of acute crisis could arise again if national policies produce accelerated construction of modern tonnage over a period of years and World War II tonnage is not broken up or sterilized. Any sharp curtailment in world traffic would suffice to bring it about. It would represent the culmination of a situation of chronic economic disequilibrium. In the absence of an international agreement, rates could be extremely low.

Finally, a fourth period in which there would be a return to normal equilibrium may also be theoretically envisioned, beginning some twenty or twenty-five years hence, as a result of the expected rapid disappearance of the war-built tonnage. In the sequence of events following World War I this period began about 1937.

It will be noted that we have placed considerable reliance on the pattern of development following World War I. It is believed that in the present situation, economic history may provide a good preview of the future. Certainly there are strong theoretical reasons for expecting a cycle of the type outlined.

Professor Marx has done well to emphasize the point that future levels of world ocean freights will depend primarily on national merchant marine policies. If highly nationalistic programs, such as that recommended for the United States in the recent Harvard Report, are widely adopted, a chronic excess of tonnage, ending as previously predicted in an acute crisis, is inevitable. It may be noted that in the Harvard Report the viewpoint taken is that it is the task of public policy to foster shipping and shipbuilding in such a manner as to, first, secure adequate capacity for national defense and, second, to minimize the cost to the federal treasury over a cycle of war and peace. The gap between wartime and peacetime requirements is, however, now so great that such policies, if widely followed, would have serious repercussions. They would make imperative international agreements to sterilize tonnage, apportion sailings, and control rates. They might also be expected to produce a freight rate level more or less permanently below the unsubsidized costs of efficient foreign operators. In other words, nationalism in shipping means in the foreign trade lower than normal rates at public expense.

In dealing with the protected coastwise and intercoastal trades, Professor Marx raises the question as to whether or not the division of traffic between rail and water carriers is satisfactory from the standpoint of maximizing the efficiency of the national economy. These trades are of course now so thoroughly isolated from the foreign carrying trades that the level of foreign trade rates is likely to have very little influence. Rail rates instead set a

ceiling on ocean rates. There is little immediate prospect in a rise in this ceiling. The problems of the protected operators are therefore to reduce costs until they can make money at existing rate levels and to secure a volume of traffic based on their relative fitness and economy as carriers. It is particularly important that cargo-handling costs, which now eat up 41 per cent of total revenues, be reduced.[6]

With respect to economy and fitness it may be noted that since World War I, because of the general employment of cheap war-built tonnage, operators' total ton-mile costs have not reflected full normal costs. In the future, unless efficient new vessels are made available at low prices by means of government aids, the cost of coastwise and intercoastal service will be higher relative to rates than before because of replacement costs. The question of the relative economy and fitness of carriers is therefore a complicated one. Does the term apply to long-run normal costs of vessels and ship operation, to short-run costs determined largely by windfalls in the form of availability at low prices of war-built tonnage, or to an artificially established long-run cost level based on an established policy of aid to this branch of the shipping industry in order to maintain it at an expanded capacity? This problem would appear to be crucial for the domestic transportation authorities.

The future of freight rates in these trades appears, however, to be much less uncertain than in the foreign trade. For a considerable time to come carrier interests and regulation are likely to hold them at present levels. Eventually new construction, the release of war-built tonnage, and the inevitable slackening in business will undoubtedly produce overcapacity and some tendencies to reduce rates. Competition in the uncontrolled bulk cargo trades may be eventually severe.

[6] Harvard Report, p. 82. See also Paul F. Lawler, "Crisis in the Domestic Shipping Industry," *Harvard Business Review*, Winter, 1946.

ECONOMIC PROBLEMS OF FOREIGN AREAS

ECONOMIC RECONSTRUCTION IN THE FAR EAST

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I

History determines for the economist the matters to which he must give attention if he is to be useful. In the Far East today he must concern himself with relief, with readjustment to the end of Japanese occupation and expansion, and with certain fundamental questions of economic organization and development.

Policy is involved; the approach must therefore be realistic; and economic matters must be viewed in their social and political setting. In the determination of policy, spirit and attitude count for much. American—and Western—economic relations with Far Eastern peoples would be better if we were sufficiently democratic in thought and action to accept these peoples as part of the world in which we live and to recognize that their claims to a peaceful and prosperous life are quite as valid as are the claims of others.

II

The Far East has suffered the destruction which goes with modern war. Capital equipment has been allowed to deteriorate. There has been demolition. The term "scorched earth" came from the Far East. There has been loss and seizure of supplies. Accounts from Shanghai show that Japanese policy in this respect was maintained to the very end. This destruction took place in countries with meager capital equipment and so poor that any failure of production and transportation was likely to mean suffering and death.

Relief has fallen to some extent to the armed forces of the Allied powers but the main task is that of the United Nations Relief and Rehabilitation Administration. Certain features of the Far Eastern activities of UNRRA are of special interest.

UNRRA is an international institution and international economic institutions have not met with much success in the Far East in the past. There has been too much regard for national prestige and too much international political competition. These difficulties were increased by the prewar efforts of the Japanese to eliminate all other powers from the area. If relief and rehabilitation can now be well done through an international organization, this will be an outstanding achievement in itself and it will pave the way for Bretton Woods, for the Food and

Agriculture Organization, the International Labor Organization, and international economic institutions generally.

In the second place, current relief in the Far East is closely related to future economic development. This is due to the shortage of capital equipment and to the fact that transportation and simple processing are an essential part of relief. Expenditure for capital equipment is, therefore, a reasonable charge against relief.

A third feature of the relief program is the extent to which local expenditures are required as a complement to imported materials and equipment. UNRRA will, no doubt, wish to minimize importation and to maximize local expenditure. Knowledge as to the necessary minimum proportion of imported equipment for the rehabilitation of a particular industry or country will facilitate plans for economic development and the establishment of policies to meet future unemployment in both industrialized and undeveloped countries.

The Chinese government's report to UNRRA in 1944 shows that a large proportion of her request for 945 million dollars is for capital goods and equipment. An examination of this request and of Chinese plans for economic development shows that the relief period is expected to require greater imports of capital goods in relation to local expenditure than the later period of development. These are revealing facts. They show that destruction must be made good at once but they show also the inadequate capital equipment of the Chinese economy.

This lack of equipment leads to a final question. How far into the postwar period should the principle of relief be extended? Consider the case of health, disease prevention, and medical care. The need is for a gift rather than a loan. In the long run, medical care may pay for itself and facilitate international payments by increasing production. But the great human need is immediate and so is the danger of the spread of disease to other countries. Problems of health are not to be solved on the principle that each country should have the equipment and technical service it is able and willing to pay for.

III

The defeat of Japan has ended a long program of Japanese expansion in the Far East. Progress was from the simple acquisition of adjacent islands to an extension of control more in keeping with industrialization and great foreign trade. Japan finally reached the sweeping regional integration of the so-called "Greater East Asia Coprosperity Sphere" based upon corporate infiltration, political pressure, and finally bare force. Expansion and forcible integration have now come to an end. How is adjustment throughout the Far East to be made?

Consider first the countries beyond the area of Japanese occupation

and control: Siberia, Australia, and New Zealand. Siberian immigration and industrialization were promoted to meet the threat of war with Japan. The population is several times what it was; many cities have doubled in numbers; at least one important industrial center is entirely new. And the war is now over.

Renewed Russian interest in Manchuria and Russian occupation of southern Korea are, no doubt, related to Siberian adjustment. What additional measures are to be expected? Will such measures indicate reliance on growing regional and world trade or will they tend to create an area within which Russia will have a special position? If Siberian industrialization is great enough to require the markets of China and Japan and raw materials from the south, liberal trade may be promoted. The policies of others will have their influence upon Russia.

In Australia and New Zealand the war increased agricultural production; in Australia there was a great increase in industrial production as well. Pearl Harbor made both countries politically and strategically aware of the Far East. What are the possibilities of new economic relations? New Zealand will hardly find Far Eastern trade an important matter, but Australia may, especially if her industry can be linked with British and American investment. The desire to maintain close economic ties within the British commonwealth may, however, prevent Australia from attempting to step out into the new Far Eastern economic scene.

A second category of countries includes those long under Japanese control. Formosa has been a Japanese colony for half a century. Important economic changes have taken place and living conditions have been improved. Japanese ownership of railways, power plants, and sugar refineries will, no doubt, be brought to an end and the Chinese will probably desire to eliminate Japanese technicians. Reliance for technical effectiveness will then be upon Formosan Chinese. They may prove equal to the task if the Chinese government establishes favorable conditions.

China must deal also with the results of Japanese protectionist policy. If China adopts liberal trade policies, Formosan adjustment may be more difficult. Technical effectiveness may then prove to be of critical importance for Formosa and for Chinese success in the government of the island.

In Korea, also, Japanese ownership of business and industry will come to an end, if Korea is to have a fair chance at independence. This will raise the same question of technical effectiveness. Koreans have been given less opportunity than Formosan Chinese to establish their own business enterprises. It is also true that Korean industry has been closely linked with Japanese war production. This will add to the difficulties of conversion but the outstanding problem will probably be the maintenance of technical effectiveness.

Korean trade with Japan has been so great in the past that special arrangements for the continuance of this trade may be necessary. Such arrangements will help to maintain an existing territorial division of labor and will bring home to the Japanese their dependence upon others for a significant part of their food supply. A growing trade beyond Japan will be the final test of successful adjustment and this should not be made more difficult by delay in the establishment of effective Korean economic unity.

In Manchuria the same problems will arise of the elimination of Japanese ownership and control, of the maintenance of technical effectiveness, and of a new economic orientation. But Manchuria is Chinese and if there is prompt integration into the Chinese economy both China and Manchuria will find adjustment easier.

A third category of countries includes all the rest of the Far East aside from Japan. In these countries Japanese occupation and control were temporary. How far did the Coprosperity Sphere indicate new possibilities for the future?

Evidence of failure is easy to find. It is probable that the Japanese carried specialization so far that they planned only for war and conquest and not for successful occupation. There were other factors also in Japanese failure: a losing war; lack of machine tools, ships, and other capital equipment; and a growing resistance to her domination. But the important question is whether Japan had any success indicating new possibilities for the future.

We do not yet know the complete answer. Before the war Japan was getting raw materials in increasing amount and variety from Far Eastern countries and her export trade was playing its part in the establishment of intraregional division of labor. During the war she extracted more from Korea, Formosa, and Manchuria, but in these countries Japanese control was of long standing. Our present interest is in the territory occupied during the war.

Occupied China was controlled by the Japanese for a number of years. The Japanese needed the products which were obtainable. They had an elaborate corporate and legal mechanism; they had "puppet" governments at their disposal. Nevertheless the Japanese did not accomplish much.

The Chinese maintained, while the war was still on, that the Japanese had accomplished nothing. This attitude is being revised. According to a well-informed Chinese official the Japanese increased the production of coal in China, opened new mines, and established new blast furnaces. They created an effective power network in one province and built no less than eleven hydroelectric plants over northern China. By their hierarchy of corporations they brought transportation and a number of important industries under unified control.

From another report we learn that "the puppet bank left as a legacy the strongest central banking control ever exercised in Shanghai." This control, we are told, will now be taken over and exercised by the Chinese Government.[1] It is clear from the available information that the Japanese had some limited success and that this success will influence the economic readjustment of China to the fall of Japan.

Concerning Indo-China, we are told of economic developments during the war "most of them disastrous" but "a few beneficial, such as the partial industrialization and the better integration of the economy of Indo-China, fitting more efficiently into the economic picture of the Far East."[2] Comments on Malaya, Thailand, and the Netherlands Indies are of a similar sort.

Over the whole occupied area the economic consequences of Japanese occupation were destructive but adjustment to the postwar situation was assisted in minor ways. Some new possibilities of increased production and trade were indicated. But Japan failed to reveal a broad concrete program of regional economic integration. It remains to be seen whether greater economic interdependence can now be established under new leadership and along liberal lines.

Japan faces problems of readjustment to defeat as well as those which touch the fundamental economic—and political—organization of the country. The chief requirement of readjustment is a great foreign trade. Trade and preparation for war built the Japanese Empire. Under new conditions and without an Empire, Japan must re-establish trade if her people are to be fed and clothed.

Japan has a geographical position which defeat cannot alter and the only population in the Far East which has manned an economy based on modern technique. But her capital equipment has been greatly impaired and the ownership and political dominance upon which she counted in the past are gone. Under the circumstances every new trade development of the war period which rests upon peacetime economic good sense will be of the highest importance. Her general need, once she has been obliged to renounce forcible integration, is liberal trade and orderly procedure in international economic relations.

Trade barriers and trade restrictions in the Far East should now be seen, by Japan and by others, not as defenses against Japanese economic aggression but as limitations upon general prosperity. Japanese readjustment depends in important respects upon the removal of such trade barriers. Colonial trade arrangements in the Far East should therefore be reconsidered. Success in dealing with Japan depends on liberal trade policies throughout the Far East and beyond the Far East. The treat-

[1] *Shanghai Evening Post and Mercury* (New York), Nov. 20, 1945, p. 7.
[2] *Pacific Affairs*, Mar., 1945, p. 108.

ment of Japan may, it is feared, re-enforce the impression in the Far East that liberal trade policies are a badge of inferiority or create the impression that they are a form of punishment.

IV

Postwar reconstruction in the Far East will emphasize a number of additional economic matters of which I can mention only a few.

The first is the importance of postwar inpayments from abroad, aside from relief, which do not involve future repayment. Such inpayments may be available for a number of reasons. They may result from existing balances abroad. Such balances are small except in the Chinese case. The whole Far Eastern occupied area stands in sharp contrast in this respect to India and Latin America. This fact should be taken into account in relief and loan policies toward Far Eastern countries.

But the chief unilateral inpayments are likely to be on reparation account. Policy toward Japanese reparation must weigh the need for capital and the slow tempo of Far Eastern economic life against the more rapid tempo of Western economic activity and the advantages of a prompt reparation settlement.

The second matter is the repayment of postwar loans and investments. Repayment may not be involved to the extent generally believed. The banker and businessman have an eye upon the individual transaction where provision for repayment is a fundamental consideration. But if China, for example, is being successfully developed in a world of expanding trade the individual transaction will offer little difficulty. When repayment can be made, the creditor country usually does not want it.

A third matter is the place of the foreigner in the economic reconstruction of the Far Eastern countries. The area occupied by Japan during the war has been the greatest area of international direct investment in the world. Seventy-seven per cent of the foreign investment in China before the war was found to be direct, or entrepreneur, investment. The percentage for South East Asia was well above 70.[3]

Entrepreneur investment brings capital, managerial skill, and technical experience into an undeveloped country in one bundle. The current international payments are adjusted to cyclical changes by their dependence on business conditions. The problem of repayment does not arise or takes a form convenient for the paying country. These are important advantages.

Against them may be set certain disadvantages. The foreign businessman or corporation may seek to avoid control or may resist national

[3] C. F. Remer, *Foreign Investment in China* (New York, 1933); H. G. Callis, *Foreign Capital in South East Asia* (New York, 1942). An unpublished study of Japan puts the prewar figure at 10% for that country.

economic policy in the undeveloped country. The foreign corporation may go in for undesired cartel or similar international arrangements. The foreign corporation or businessman may be, as in the case of Japan, the unavowed political agent of his own government. Nationalist feeling in the undeveloped country may oppose entrepreneur investment, holding it to be a sign of inferiority or a threat to independence.

Direct investment has been of such great importance in the past and offers so useful an instrument of reconstruction for the present that the countries involved should facilitate its use. The disadvantages of such investment should be removed even if their removal requires general international action.

A final matter is that of linking the long-run economic development of Eastern countries with the shorter-run unemployment and business cycle policies of industrialized countries. Far Eastern countries may well plan certain developments with the understanding that they will not be undertaken unless the borrowing can be done at low rates of interest and the capital goods procured at bargain prices.[4] Such plans might be worked out by two countries in collaboration or by a number of countries through international institutions.

V

Wise relief policies, the best possible adjustment to the fall of Japan, and orderly international payments may not make the road to long-run reconstruction smooth. The war has cut deep and reconstruction may involve fundamental features of the economic organization of Far Eastern countries.

Consider the state of the Far East today. The war has profoundly stirred the whole occupied area. Inflation, underground resistance, guerilla warfare, collaboration, and shifts in Japanese policy have shaken confidence in stability. Changes may now come quickly which under more normal circumstances would have required a long time.

Resistance to Japan has been an important factor. Nationalism is now stronger and more revolutionary. Those who worked against the Japanese at great risk now feel claims to leadership. Collaboration with the Japanese during the years of occupation was more noticeable and more general among the well-to-do and the conservative. Resistance, with notable exceptions, has been most vigorous among the more radical. There is now the possibility in every country occupied by the Japanese of a strong revolutionary nationalist movement led by men who have learned to use force and who are critical of the conservative, landowning, governing class.

[4] A suggestion along these lines has been made by Professor Staley and applied to the United States and China. See Chapter 6 of his *World Economic Development* (Montreal, 1944).

Over a part of the Far East, Japanese occupation drove out colonial governments. The return of some of these governments is being resisted by force. Potential resistance is more general. Leadership against the re-establishment of colonial power is likely to come into the hands of those who were most effective against the Japanese even though the colonial powers were at war with Japan.

A further factor is the Allied occupation of Japan. If occupation policy is to be successful it must bring about fundamental changes in the economic, social, and political organization of that country. The foreign powers must themselves promote change of a revolutionary sort. The aims and methods of the Allies and of the United States will be closely watched throughout the Far East. A drastic policy toward Japan which appears to be successful will encourage change elsewhere.

A final factor is the increased prestige of the Soviet Government. This has given communism and other radical movements an energy which they did not have at an earlier time. The Russian example will—and Russian policy may—tend to bring into question the present economic and social organization of Far Eastern countries.

If questions of a fundamental sort arise, what form are these questions likely to take? What consequences are to be looked for within the various countries and in their foreign relations? In part the answer is already indicated by the course of events.

Over the whole Far Eastern area from Burma to the Philippines, from Korea to Java, recent developments indicate that the chief place may be taken by land problems—problems having to do with the ownership, control, and use of land—and with the place of the peasant in the economic and political life of the country. But the land problem will be closely linked with that of industrialization. In the words of a Chinese friend, "Which comes first, the industrial revolution or the land revolution?"

For Indo-China we have a persuasive statement of the usual answer to this question. The author begins with the assertion that the standard of living in Indo-China can be raised only by industrialization. He finds certain industries possible—textiles for example. The program of industrialization must, as he sees it, be financed by the government and from abroad. But, he maintains, no improvement is to be expected in living standards "before a very large number of peasants, now tilling the soil, become industrial workers." The good effect upon peasant and agricultural village is to be indirect and slow.[5]

The Bombay plan for the economic development of India is an ambitious postwar program for a country with an economic structure like

[5] Gaston Rueff, "Post-war Problems of French Indo-China: Economic Aspects," *Pacific Affairs*, June, 1945, p. 137ff.

that of Far Eastern countries. The plan calls for a total investment of 30 billion dollars, the doubling of the per capita national income, and a fivefold increase in industrial production within a period of fifteen years. But it does not call for preliminary or even for early change in the position of the peasant or for direct attack upon the land question. One of the authors of the plan has expressed the conviction that fundamental changes in Indian economic organization are necessary but he believes that industrialization must come first and work a gradual solution of the agrarian problem.

The economic development of China has been, and is being, given serious attention by her leaders. Those in the Kuomintang and the government tend to put industrial development first and to concentrate upon it, although this has aroused some disagreement even within the party. They look for long-run effects upon the countryside but they regard urban industrialization as the early and dynamic factor in the reconstruction of China.

In sharp contrast is the attitude of those who hold that radical change in the position of the peasant and in his relation to landlord and moneylender constitutes the first step in economic development. According to the Chinese communist leader, Mao Tse-tung, the foremost feature of the "New Democracy" in China is to be an agrarian revolution. Such a revolution must precede industrialization. It is a prerequisite to what the Chinese communists call democratic capitalism.

In India a "people's plan" for economic development has been brought forward which differs from the Bombay plan by giving first place to the land problem. In French Indo-China, the movement against French control finds hope for popular support in the peasant attitude toward the land. In the Netherlands Indies, Burma, and the Philippines there are peasant movements which offer resistance to accepted economic organization.

Throughout the Far East, those who give primary importance to the agrarian problem are more radical, more communist, and more closely associated with the peasant. They have usually been concerned with guerilla or underground resistance to Japan. They are distrustful of landlord and government and they look to Russia for understanding and sympathy. Those, on the other hand, who give first place to industrialization tend to be more conservative and to be associated with the landowning and governing classes. They hold a nationalism which is free of communism and of revolutionary features. They give greater importance to the need for foreign capital and the means of getting it. They look to the democratic countries of the West for sympathy and support.

War has strengthened the groups and leaders who put the agrarian

revolution first. This has important implications for policy. Economic policy now requires not only an examination of the external economic relations of Far Eastern countries but a sound analysis of their internal economy as well. If there were time I would make a plea for an objective, international study—to include Russian economists—of the conditions of successful economic development in the Far East. I can do no more, however, than point out that American economic policy ought not to be radical in Japan, conservative in China, anticolonial in the Philippines, and in support of colonial power elsewhere.

Economic reconstruction under the conditions of profound disturbance which now exist in the Far East cannot be expected to work smoothly. It may not proceed peacefully, for powerful interests are at stake and great issues are being determined.

VI

Changes in the economic organization of states and peoples are the empirical basis for the study of economic development. When changes are taking place on such a scale as now seems likely in the Far East, the economist ought to have as part of his own capital equipment adequate theories of economic development.

This is not a plea for laws of history after the manner of the German Historical School nor for a grand theory of social change after the manner of Karl Marx. It is perhaps merely an assertion that economic policy toward China requires more than an estimate of the conditions of equilibrium in her balance of payments; that economic policy toward Japan requires more than an estimate of Japanese capacity to pay reparation under certain assumptions. In spite of the good work that has been done, the great need for wise policy in the Far East today seems to me to direct attention to the imperfect state of the theory of economic development.

THE FINANCIAL POSITION OF CHINA AND JAPAN

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Introduction

The opening *manu militari* of the ports of China and Japan in the middle of the nineteenth century was followed by different political and economic developments, which caused different patterns of financial relations to be established by the two countries with foreign countries. By the end of the nineteenth century Japan had adopted the gold standard, and during the first World War her special and commercial banks established a world-wide system of foreign branches and correspondents; in the thirties, the application of intricate forms of currency management and exchange control enabled Japan to integrate extensive foreign areas in her sphere of political and economic control and to monopolize foreign sources of strategic materials for her own industries. On the other hand, it was not until the mid-twenties that Chinese banks ventured into foreign business and it took another decade for China to shift from the silver standard to a managed paper standard and to secure national control of finance and currency.

In the course of over half a century, Japan concentrated her financial resources on strengthening her industrial power at home and expanding her economic interests abroad. China's financial resources, on the contrary, were dispersed in individual commercial and speculative ventures; the treaty ports, which drew to themselves a disproportionately large part of the national wealth, remained detached from the traditional economy of the country and developed as commercial entrepots for the Far Eastern area.

Wartime Finances of China

The outbreak of the war with Japan in July, 1937, found China engaged in a long-term policy of unification and stabilization. The National Government had gradually expanded its budget, with expenditures reaching a little over one billion national yuan in 1936–37; of this about four-fifths were covered by fiscal revenues and the balance by loans. Due to the lack of an investment bond market, the burden of financing government deficits rested with banking institutions and even such moderate deficits as 200 or 300 million national yuan a year entailed some degree of monetary expansion. The financial and monetary position of the government, however, was comparatively strong as a result of the currency reform of November, 1935, which had introduced a sole legal tender currency in the form of notes issued by the four

government banks and had made possible the withdrawal and nationalization of all silver coins and bullion. The sale of silver by the National Government of China to the United States Treasury placed for the first time considerable foreign exchange balances at the disposal of the government banks, thus enabling them to take over a larger share of foreign trade financing from foreign banks and stabilize the exchange market. During the decade preceding the outbreak of the war with Japan, an uninterrupted decline in the value of China's foreign trade—from 1,450 million dollars to 600 million dollars a year—was accompanied by a contraction in the trade deficit from 200 to 300 million dollars to less than 100 million dollars a year, an amount which could then be covered entirely by the inflow of overseas remittances. There were few new foreign investments in China during this period, and the whole trend of government policy and private initiative was toward a gradual economic development of the country based upon its own financial and economic capacity.

The war interrupted this unification and stabilization process in its very beginning and forced the National Government to rely on the banks of issue for domestic financing and on the use of foreign balances and credits for payments abroad. No precise information is available concerning the budget of the National Government since 1937, but according to figures released from time to time by Chinese authorities and estimates made by Chinese economists, public expenditures during the period 1937–41 inclusive appear to have aggregated some 23 billion national yuan. For approximately two-thirds of the expenditures, the government had recourse to note issue. As the increasing war demands could be satisfied neither by increasing productivity nor by voluntary or planned reduction in civilian consumption, the result was inflation. It is significant to note that China's economy, based upon the traditional village structure, did not show the effects of inflation until late in the war. In 1941, however, the currency in circulation began expanding at a rate faster than budgetary deficits, and prices began advancing at a rate faster than currency in circulation. By the end of 1941 the note circulation of the government banks had increased slightly over ten times, while wholesale prices in Chungking had risen seventeen times as compared with the levels prevailing in mid-1937.

At the outbreak of hostilities in July, 1937, the Central Bank of China undertook to support the value of the national yuan at $0.29 and 1*s.* 2*d.* by exchange operations in the open market. It was not until March, 1938, that, in order to arrest the drainage of its exchange resources by private speculators and Japanese banks, the Central Bank of China introduced a system of rationing and control for its sale of foreign currencies at official rates. In fact, however, it proved impossible

for the Central Bank of China to enforce effective measures of exchange control, because of the autonomous status enjoyed by the foreign banks in the Shanghai and other major markets, and the exchange rationing gave rise to a dual system of free and official exchange rates. Despite continued support from Chinese and British banks, the national yuan followed an irregular course in the free market and depreciated to $0.05 by the middle of 1941. By this time China had liquidated the dollar balances acquired through the sale of silver and had nearly exhausted the various commercial credits and other financial facilities extended to her by agencies of the American, British, and Russian governments. At this point, the United States Government, jointly with the Government of the United Kingdom, extended new assistance to the National Government of China beyond the traditional granting of credits. The three governments joined in setting up a Stabilization Board of China, with authority to control all foreign financial operations with the dollar and sterling areas by banks, companies, and individuals (whether of Chinese or foreign nationality) and to define the legitimate operations and fix the official buying and selling rate between the national yuan and the dollar and pound. This was an entirely novel experiment of international co-operation, which for the first time introduced an effective control over the operations of foreign institutions and nationals in China.

The Stabilization Board of China, which began operations on August 13, 1941, was actually of importance for only a few months. The seizure of the coastal centers of China and the advance of Japanese forces into Southeast Asia at the end of 1941 and the beginning of 1942 brought to an end the activities of foreign banks and firms in the major financial markets and interrupted all of China's foreign commercial relations. This alleviated the stringency of foreign resources, as Chinese defense needs were supplied by the United States through lend-lease to the extent permitted by transportation facilities, while remittances from overseas Chinese and Allied military disbursements provided China with foreign balances considerably in excess of her current requirements for foreign payments. As a result, the National Government of China began in 1942 to accumulate dollar balances, which grew in magnitude with the expansion of American war activities in China. The rapid rise of prices which took place in China after 1942 eventually led to the abandonment of the official rate of $0.05 as the basis for compensating the National Government for currency and credits in national yuan made available to the United States Army. From the early part of 1944 on, settlement of such advances was made subject to exchange rates and other conditions to be agreed upon from time to time by the United States Treasury and China's Ministry of Finance.

From 1942 on the military and economic blockade of China imposed increasing strains upon the finances of the National Government, and government expenditures continued to move upward along with prices, while the expansion of currency closely reflected budgetary deficits and Allied outlays. The currency in circulation probably reached a level between 500 and 600 billion national yuan by the end of the Pacific War. Prices in Chungking were reported at 700 times prewar figures in the latter part of 1944. The rise of prices was somewhat slower in the second half of 1944 than in previous periods, but resumed a faster tempo in 1945, and in August, 1945, the price level in Chungking was reported at about 2,500 times the prewar level. The end of the war, far from easing these hyperinflationary conditions, actually aggravated them, as the movement of military forces and population increased the demand for currency and caused further economic dislocations in the country.

Financial Conditions in Occupied China

The characteristic feature of the Japanese occupation has been the dismemberment of China into separate political and administrative zones, each with its own financial organization and currency, distinguished chiefly by the degree of integration with the economic, financial, and monetary systems of Japan. Formosa had become a Japanese colony in 1895 and had its own local yen currency issued by the Bank of Taiwan. In Manchuria, where the Japanese sponsored the state of "Manchoukuo," the Central Bank of Manchou was organized in 1932. In the latter part of 1937 the Federal Autonomous Government of Mongolia in Kalgan had organized the Bank of Mongolia as the note issue institution for Inner Mongolia. In 1938 the Provisional Government of China (later changed to North China Political Council) in Peiping had organized the Federal Reserve Bank of China as the note issue institution for Northern China. Finally, in 1941 the National Government of China in Nanking had organized the Central Reserve Bank of China as the note issue institution for Central and Southern China. The degree to which the finances and currencies of these areas were integrated with one another and with the financial and monetary system of Japan varied considerably. Japanese authorities were guided by political considerations in fixing the official value of the currencies of the yen bloc, but the different levels of inflation caused a system of rigid exchange controls to be maintained not only between the Japanese Empire and Occupied China, but also between zones in Occupied China. These exchange controls implemented and strengthened the system of trade barriers, which were maintained for over-all economic and political purposes.

Thus, while the yen of the Bank of Taiwan was in no way different

from the yen of the Bank of Japan and could circulate freely throughout the Japanese Empire, the other currencies of Occupied China were legally treated in the Empire as foreign currencies. The official exchange rates did not reflect in any way the relations between the purchasing powers of the various currencies. In 1944 and 1945 the flight from yen currencies in Occupied China assumed such proportions that prices in terms of the local currency took an uptrend sharper than in Free China; in particular, prices in Central and Southern China rose above those in the interior by the early part of 1945 and were many times higher by the end of the Pacific War.

Information concerning the finances of the Japanese-dominated governments and their banks of issue is entirely inadequate for estimating the burden of the Japanese occupation. Some general trends, however, may be surmised. During the first four years of the war (1937–40) the Special Account of the Government General of Taiwan had net surpluses aggregating 160 million yen after transfers of 30 million yen as contributions to Japan's war effort. The account's estimates for 1941 and 1942 showed small deficits, with a considerable increase in the outlays for public works and in military contributions. The budgets of Manchoukuo carried chronic deficits, largely representing the government's participation in the development program carried out by Japanese authorities and companies. These deficits were about 400 million Manchou yuan a year between 1937 and 1941. Afterwards, they rose to considerably higher levels as a result of the government's larger participation in development and defense, which was the result of a curtailment of Japanese investments and military outlays. Until 1941, the Federal Autonomous Government of Mongolia and the North China Political Council reported small budget surpluses; afterwards they were apparently able for some time to meet their extraordinary outlays through the imposition of new taxes and the use of accumulated balances, but in the latter part of the war both governments appeared to be confronted with large deficits. The National Government of the Republic of China in Nanking began its activities in 1940 with a deficit of about 60 million Central Reserve yuan and reported a deficit of 260 million Central Reserve yuan for the first half of 1943; this trend to expanding expenditures and deficits continued to prevail in later years.

The Japanese-dominated banks of issue in Occupied China had four main functions: (1) to issue their own notes in exchange for national yuan, yen, and local currency notes; (2) to provide the currency needs of the Japanese armed forces; (3) to provide capital funds and credit facilities for the development of industries and trade under Japanese control; and (4) to finance the budgetary deficits of the local government. All but the first of these functions had a distinctly inflationary

character, particularly in the latter part of the war when the banks were called upon to finance the expanding deficits of the local governments and the increasing requirements of the Japanese forces. Taking as a basis the reported figures of circulation at the close of 1941, the note issue of the Central Reserve Bank of China had expanded by the end of the Pacific War by 150,000 per cent, that of the Federal Reserve Bank of China by 3,000 per cent, that of the Bank of Taiwan by 540 per cent, and that of the Central Bank of Manchou by 530 per cent.

A complete blackout of statistical information and the tangled structure of economic relations make it impossible to determine the financial position of Occupied China vis-à-vis Japan. Japanese authorities made use, to various extents at different times and places, of three principal procedures for obtaining the necessary means for purchasing goods and meeting military requirements in China; namely, the levy of contributions upon the Japanese-dominated governments, the issuance of military yen notes, and the acquisition of local currency from the Japanese-dominated banks of issue. While Japan apparently imposed neither occupation costs nor reparations upon China, it levied certain contributions for declared purposes of economic and "financial co-operation" and "joint defense." Japanese authorities, however, paid for the larger part of goods and services either through the issuance of military yen notes or by drawing upon lines of credit extended to them by the banks of issue. The military yen notes were withdrawn as soon as the new currencies issued by the Japanese-dominated central banks had gained acceptance among the population. Information available seems to indicate that the Japanese Government compensated the central banks with yen credits on the books of the Bank of Japan in amounts equivalent to those of military yen notes withdrawn. Thus, while the levying of contributions was a self-liquidating operation, the issuance of military notes and the use of central bank credit gave rise to credit balances for the Japanese-dominated banks of issue at the Bank of Japan and other Japanese institutions.

Scattered information indicates that Japan's short-term borrowing from the occupied zones of China assumed large proportions in the course of the Pacific War, and a shift occurred in the direction of trade and investments between China and Japan. Most likely, Manchuria and the rest of Occupied China passed from passive to active balances of trade as a result of the greater demand for raw materials and manufactured goods from the Japanese home market and Japan's armed forces, and smaller available supplies of new industrial equipment from Japanese industries. The short-term yen balances accumulated by Occupied China on account of goods and services transferred to Japan in the latter part of the war may well have exceeded the original value of

Japanese long-term investments made in China before and during the war. However, the debtor-creditor position of China and Japan will be determined by postwar political decisions and economic developments rather than by temporary situations which existed before or came into being during the war.

Wartime Financial Policies of Japan

Whereas the National Government of China lacked the administrative tools and the Japanese authorities in China lacked the political foundation for an effective financial policy in wartime, the Japanese Government had both the necessary tools and a strong national foundation, as well as the further advantage of time and experience. The opening of hostilities in China in 1937 found Japan already committed to a war economy, the financial aspects of which were a managed use of central bank credit and a controlled depreciation of the exchange rate. Finance Minister Korekiyo Takahashi had initiated this reflationary policy in 1932 with economic recovery as the major aim, but also in order to support the armament program and the program of investments in Manchuria. It was Mr. Takahashi's idea that the inflationary pressure exercised by government borrowing from the Bank of Japan could be offset if commercial banks and savings institutions could be directed to invest the liquid funds thus created in government bonds. This "capital circuit" was to create a situation of easy money and declining interest rates while preventing the note issue of the Bank of Japan from rising irregularly or abruptly.

Mr. Takahashi, however, was murdered on February 26, 1936, and his disappearance marked the beginning of a new phase in Japan's financial policy, in which war and war preparation became all important. The government budget which Takahashi had kept within the limits of 1,950 million to 2,200 million yen doubled in 1937–38 and began thereafter a rapid and uninterrupted ascent up to 18,700 million yen in 1941–42 and 75,000 million yen in 1944–45. Whereas Mr. Takahashi had considered 600 million yen as the "safe limit" for government deficits, these rose to 1,500 million yen in 1937–38, 6,900 million yen in 1941–42 and 33,700 million yen in 1944–45. During the Takahashi administration the financing of government deficits absorbed only one-twentieth of the national income; the ratio rose to between one-fifth and one-fourth in the years of the China War (1937–41) and to between one-third and one-half in the years of the Pacific War (1942–45).

Because of the magnitude which the financing operations assumed in wartime, the Japanese Government and the Bank of Japan gradually abandoned the fundamental principle of the Takahashi policy—that the distribution of government bonds was to be effected through volun-

tary purchases by banks, other financial institutions, and corporate and individual investors. During the China War (1937–41) the Ministry of Finance and the Bank of Japan made use of direct arrangements with and applied moral suasion to banks and financial institutions and conducted savings campaigns among the people with strong patriotic pressure. During the Pacific War (1942–45) they finally had recourse to administrative measures requiring banks and other financial institutions to invest fixed quotas of their expanding volume of deposits and liquid funds in government bonds, and also to the compulsory investment in government bonds of certain corporate funds and of the proceeds from certain capital transactions. This compulsory procedure, as it became more and more severe, reacted as a boomerang on the Bank of Japan, which had to expand its discount operations correspondingly in order to maintain the cash reserves of banks at adequate levels and facilitate their financing of industrial activities of a strategic character. The balance sheet of the Bank of Japan expanded from 2,425 million to 5,865 million yen, or by 144 per cent between June, 1937, and June, 1941. Only a few items were responsible for this growth; on the asset side holdings of government bonds increased by 2,960 million (+337 per cent), while on the liability side notes in circulation and government deposits rose by 2,605 million (+159 per cent), and 500 million (+163 per cent), respectively. Between June, 1941, and May, 1944 (the last date for which a complete balance sheet of the Bank of Japan is available here), the aggregate assets/liabilities of the bank expanded by 174 per cent to 16,170 million yen. Reversing the earlier process, the expansion of note circulation was greater than that of government bond holdings, the former rising by 7,205 million (+170 per cent), while the latter increased by 5,240 million (+144 per cent); the discount of other banks' paper, covered by war contracts and guaranteed by the government, increased by 2,765 million yen, or 490 per cent.

This accelerating trend of monetary expansion and the shift in the Bank of Japan from direct to indirect financing of the government became particularly marked as the Pacific War was drawing to an end. The Bank of Japan was called upon to make advances to other banks to enable them to make payments for air raid damage and other losses and for discharge allowances and other claims insured or guaranteed by the government. As a result, by the end of the war the Bank of Japan's discounts and advances to banks rose to about 25,000 million yen, with a net increase of 21,660 million and a percentage increase of 648 as compared with May, 1944. The Bank of Japan attempted to counteract this expansion of bank credit by a reduction of its government bond holdings, which it cut by 2,950 million (30 per cent) to 6,340 million yen. This reduction was entirely inadequate to stem the rising tide of infla-

tion, which took place through the expansion of note issue by 17,010 million to 28,460 million yen (+150 per cent) and an increase of 12,030 million (1,200 per cent) in government and other deposits to 13,060 million yen.

This analysis of the position of the Bank of Japan brings out a significant point with a bearing upon current and postwar financial policies. During the China War and the early period of the Pacific War the Japanese Government financed itself through the issuance of long-term loans, the largest part of which found its way into the market; in the latter part of the Pacific War, however, the "capital circuit" devised by Mr. Takahashi broke down entirely, and the Japanese Government was confronted with a floating debt and contingent liabilities growing at rates faster than the capacity of the market to absorb new bond issues. By the end of the war, the outstanding government bonds were reported at about 120 billion yen, in addition to a floating debt tentatively estimated at 40 billion yen and contingent liabilities of unknown amount (but placed by unofficial sources at not less than 60 billion yen and presumably at a much higher figure). This situation of impending financial disaster contrasted vividly with the strong financial position with which Japan had embarked in the China War in 1937, when the long-term debt of the government did not amount to 10 billion yen, its floating debt was about half a billion, and its contingent liabilities were not important items.

It is interesting to note that, despite the unprecedented budgetary deficits and the corresponding expansion of credit and currency, the Japanese Government was apparently in a position to control the rise of prices and to moderate the trend of inflation up to the end of the war. The Tokyo wholesale price index stood at 158 in March, 1944, and the Tokyo retail price index stood at 202 in November, 1944 (July 1937 = 100). These official indices did not take into account the sharp deterioration in the quality of most goods nor the prices prevailing in black markets, which had become very widespread by the beginning of 1945. Yet, with all these limitations, it would appear that the rise of prices fell far behind the expansion of currency and credit, with the result that the decline in the purchasing power of the monetary unit had been more than compensated by the expansion of its outstanding volume. In other words, at the end of the war there was in Japan a considerable margin of potential inflation which a system of controls—however imperfect but sufficiently effective—had prevented from exercising fully its effects on the official and unofficial markets of goods and services.

The Aftermath of the War

The abrupt conclusion of the Pacific War found China in the midst of

a hyperinflationary situation, with prices rising in a market unhindered by controls at a faster rate than the supply of paper money, and Japan under the pressure of potentially strong inflationary forces, which had been held in check by a combination of financial and economic controls.

Inflation in China is leading to the elimination of the existing currency as the monetary standard of the country. Under present conditions, it appears that inflation has already ceased to be the major factor in China's financial position, and there seems to be no alternative to awaiting a more propitious time for the reorganization of the monetary system and the stabilization of the currency. The immediately pressing problems are less those of inflation than those of the adjustments made necessary for the currencies in circulation in former Japanese-occupied zones by the reintroduction of the national yuan, and the effects which the introduction of the dollar as a general medium of payments in former treaty ports is exercising on the use of the national yuan itself.

Shortly after the liberation of Shanghai, the National Government of China issued regulations for a limited conversion of Central Reserve currency (up to 100,000 Central Reserve yuan daily) into national yuan; the deadline for the execution of the program was fixed at March 30, 1946. A similar program was announced in November, 1945, for the conversion of Federal Reserve currency into national yuan, to take effect between January 4 and April 13, 1946, at which date Federal Reserve notes would cease to be valid. This was accompanied by the announcement that special yuan scrips would be temporarily issued for Formosa and Manchuria. No mention was made of the treatment to be applied to the Mongolian currency.

The most urgent task for the National Government has been the fixing of conversion rates at which the currencies issued by the various Japanese-dominated central banks could circulate, pending the completion of the conversion, side by side with the national yuan. These rates are intended to be convenience rates, without any implication as to the final value and disposition of such currencies. In fixing the rates, the National Government of China was guided primarily by political principles and gave only subordinate attention to economic factors. With the exception of Central China, inflation in the other zones had progressed during the war at a much slower pace than in Free China, and it is doubtful whether a depreciation of these currencies vis-à-vis the national yuan had any basis of economic facts. The general rule adopted by the National Government, however, has been to undervalue the Japanese-dominated currencies vis-à-vis the national yuan; this political rule was tempered to some extent by a favorable treatment of the currencies in circulation in zones which had been longest under Japanese occupation and had suffered least from inflatiôn. Thus, the

currency in circulation in Central China was depreciated to 200 Central Reserve yuan = 1 national yuan, while in Northern China the local currency was maintained in circulation at the rate of 5 Federal Reserve yuan = 1 national yuan; the rate between the special yuan scrip and the Manchu yuan and Formosan yen was reportedly fixed at 1:1; no rate has been so far announced for the Mongolian currency.

The drastic depreciation of the Central Reserve yuan in Shanghai was accompanied by the introduction of a special exchange rate of 500 national yuan to the dollar for overseas remittances to China; this rate was also extended to official exchange transactions for members of the American forces and civilian agencies. The rate represented a considerable overvaluation of the national yuan vis-à-vis the dollar, on the basis of both purchasing power parities and the open-market rates prevailing in Shanghai for dollar notes. The fixing of this legal rate was accompanied by very large importation of dollar currency, on both American and Chinese accounts, official as well as private. The result was that not only did the Central Reserve yuan cease to be an acceptable means of payment among the population but the use of the national yuan itself was largely discarded by the market in favor of the dollar. The wide use and circulation of the dollar for financial transactions is likely to prove one of the most serious obstacles to the reintroduction of a national currency.

The Japanese situation, on the contrary, is strictly an inflationary one, the yen remaining the sole and general monetary standard, unaffected by the intrusion of other internal or foreign currencies. As in European countries, from the beginning the United States military authorities in Japan made use of the yen exclusively for their local disbursements and the amount of dollar currency brought into Japan by individual members of the armed forces was not so large as to displace the yen anywhere as the general circulating medium. Contrary to the Allies' practice in Europe of fixing low and punitive rates for the currencies of enemy countries, however, the value of the yen was set at a level which tended to overvalue it from the beginning. The new rate of 1 dollar = 15 yen represented an exchange depreciation of the yen by only 67 per cent from its 1937 value; this compared with a depreciation of its internal purchasing power—as measured by the Tokyo official retail price index—by 57 per cent as of the latter part of 1944 and probably by a much higher percentage as of August, 1945. During the same period, the internal value of the dollar—based on the cost-of-living index of the United States Bureau of Labor Statistics—declined by 20 per cent only. If black market prices, deterioration of quality, and lack of goods—which became all-important factors in Japan after the start of the devastating air raids in March, 1945—were given due considera-

tion, then the internal depreciation of the yen from its 1937 value would have to be estimated at 80 per cent or more.

The new exchange rate of the yen, far from being inflationary, acted from the start as a deterrent to spending by individual members of the Allied forces. This curb gained strength as prices went on rising, while the exchange value of the yen remained unchanged. The rapid rise of prices which immediately followed the American occupation of Japan, may be attributed fundamentally to the psychological impact of the military defeat and to the dislocation of an economy geared for war production and heavily dependent upon foreign supplies. Under these conditions, the loosening of administrative controls permitted the wartime accumulation of liquid funds to exercise its influence upon prices, which initiated a rapidly rising trend. The continuous deficits incurred by the Japanese Government, in order to meet the costs of the military and economic demobilization and Allied occupation, added impetus to the upward spiral of prices and circulation, and Japan entered an advanced phase of inflation. As in the case of European countries, it would seem possible for Japan to stem the advance of inflation by a combination of financial devices,such as exchange and contraction of outstanding currency and severe capital taxation, and administrative controls on distribution and prices. It should be noted, however, that while these emergency measures might be effective in preventing hyperinflation in the transition period, they could not possibly solve Japan's long-term problems of finance and exchange, which are bound to arise from the territorial and economic conditions of the peace.

Peace Problems and Postwar Perspectives

The relative financial trends in China and Japan are likely to be reversed as time passes on. Aside from the considerable dollar credits, which China holds at present, and any assistance which she may receive from abroad, the reparations which will be imposed upon Japan and the territorial readjustments which are being put into effect will fundamentally alter the financial position of the two countries in the long run. China's major problem in the postwar period will be the reintegration of zones of different industrial and financial development into a nationally unified and organized economy, while Japan will be confronted with the task of readjusting her economy from a basis of colonial and overseas expansion to the restricted capacity and needs of the home market.

Aside from foreign zones under Japanese control, the areas detached from the Empire—Formosa and the Pescadores, the Pacific Islands, Sakhalin, and Korea—represented on the whole net assets for Japan's economy, of which they were integrant parts and to which they con-

tributed foodstuffs and minerals and also net amounts of gold and foreign exchange. The recovery of Formosa and Manchuria and other internal areas will bring back to China a wealth of natural resources and also an industrial capacity which has been expanded considerably by Japanese initiative and capital. From the standpoint of the peace settlement and future relations between Japan and China, it is significant to note that Formosa and Manchuria have become important creditors toward the Japanese Government through the Japanese Government bonds held either directly or by their nationals, and through the credits on the Bank of Japan held by their banks of issue, although they remain debtors vis-à-vis private Japanese interests on account of Japanese industrial and commercial investments on their territories. Except for those Japanese private assets which will be confiscated on reparation account, China might offset these credits and debits; i.e., use the holdings of Japanese Government bonds of her government and nationals to pay off Japanese private owners for assets situated on Chinese territory.

In addition to taking over Japanese industrial properties on her territory, China will also be entitled to present claims for industrial plants and equipment from Japan proper. As a result, China may be confronted in the course of the next few years, with the problem of absorbing a far greater industrial capacity than her managerial and technical personnel and skilled labor can possibly operate. Moreover, other difficulties are likely to be caused by the provision of the many and intricate financial facilities which are the necessary complement of a modern industrial economy. China's banking and credit system was still inadequately developed in 1937, particularly with regard to intermediate and long-term financing, despite the great progress achieved during the preceding years. Under the impact of the war, the entire financial structure has been disrupted, there has been a certain deterioration in interbank and internal technical organization, government banks have been burdened with the financing of budgetary deficits and wartime activities, and private commercial banks have lost in importance. Reorganization of the financial structure, with particular regard to those institutions and organs serving the requirements of reconstruction and development, may be considered as the fundamental prerequisite for orderly progress in the postwar era. The danger is that China may try to go too fast too far with the limited means at her own disposal, relying on the easy way of financing deficits and expansion by central bank credit and note issues. Such a policy would entail considerable economic and social waste and continued inflation. It would hamper instead of facilitating the internal financial reorganization and it would delay the stabilization of the currency and the lifting of exchange and trade restrictions. It

might also endanger co-operation from other countries, from which China expects large-scale and immediate assistance.

As a result of the loss of investments in the colonies and overseas and changes in economic activity in the home islands, Japan will find herself with a financial structure which is overexpanded and out of line with the requirements of her postwar economy. In addition to the special institutions which had been organized for distinct purposes of colonial administration or penetration into foreign areas, most of the other government and private institutions also established, to a varying extent, close ties with foreign trade activities and strategic industries and participated in the financing of economic development in China. Aside from any political consideration, it is extremely doubtful, for example, whether Japan's foreign trade in the coming years could provide a *raison d'être* for the vast international organization of the Yokohama Specie Bank, or whether her industrial activity could justify the preservation of the elaborate financial machinery which backed the industrial concentration of the Zaibatsu and the expansion abroad. On the other hand, financial facilities for domestic trade, small and medium industries, and agricultural activities were always scarce in Japan, despite the paternalistic attitude of the government, and they will probably prove inadequate to meet the special needs arising out of the shift from heavy to light industries and from concentration to dispersion of economic resources. It may be said that the efficiency test of the Japanese financial system will be its adaptability to an entirely new situation, which will require the abandonment of well-established business practices for new experimental ways. As in the case of China, it will be important for Japan to maintain an even pace between financial and economic readjustments, lest the inability of the banking and credit system to provide the necessary facilities to a changed economic organization result in reliance upon the central bank and the perpetuation of the state paternalism of the past.

The general problem in the Far East is how the new economic forces aroused by the war can gather sufficient strength for autonomous development, free of foreign domination and of state or capitalistic monopolies. From this point of view, great importance must be attached to the need for mutual adjustments and parallel courses in making financial and economic changes, in order to develop a financial structure which will be thoroughly in harmony with the economic system and able to provide the special facilities required by the new and various economic activities. This organizational approach is of fundamental importance, not only from the standpoint of the various internal economies, but internationally in the relations between the various countries. In fact, the economies of China, Korea, and Japan are not competitive

but complementary and Japan will presumably remain for some time to come a more highly industrialized country in a position to supply manufactured goods in exchange for raw materials and foodstuffs Above all, Japan will have a surplus of technical personnel and skilled labor at a time when China and Korea may find it difficult to run the vast industrial system taken over from the Japanese. China and Korea may find it expedient to make special arrangements (in the form of reparations, for example) to draw upon Japanese manpower in the immediate postwar period. This idea has been envisaged by Chinese businessmen and is currently being put into practice by the National Government of China in the liberated areas. A vanquished and weakened Japan may find her way back into the family of nations by assisting the reconstruction and independence of those countries which her forces tried to subjugate, thereby helping in the economic stabilization and political security of the Far East.

TRENDS AND CONFLICTS IN THE BRITISH ECONOMY

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The White Paper, "Statistics Relating to the War Effort of the United Kingdom," presents an immortal picture of unique human achievement—the complete mobilization of a free democracy, without the loss of major liberties, for active combat.[1]

Although these statistical data cannot hope to reveal the attendant physical and psychological strain and dislocation of family life, they do indicate that Britain's brilliant record was achieved only by severe drafts upon the national capital, in life and in property, and by the imposition of a mortgage on future output in the form of new international obligations. For example, between September, 1939, and June 1944, overseas assets totaling 4,260 million dollars had to be realized and new liabilities of 9,200 million incurred to meet the ceaseless demands of the war machine.

In the face of virtual bankruptcy, Britain is challenged to provide her citizens with a fuller, healthier, and happier life than they have ever experienced in the past. It is vital, also, that the unity of purpose, freedom of speech, and effective scheme of social collaboration attained in the years of war be preserved in those of peace. The recent Labor Party landslide focused national and international attention upon the necessity for the nation to conceive an economic policy dedicated to the achievement of increased national efficiency and a high and stable level of employment; the assurance that no citizen will be allowed to fall below a standard of welfare defined, in the main, in terms of food, housing, and education; the acceptance of the premise that the national quantum of wealth produced and consumed will be as large as possible; and the reorganization of the system of international commerce.

Britain's immediate position will not be affected so much by the Labor Party's socialist theories as by the hard logic of her economic problems. In the gravity of the present hour the ruling slogan has become: "Double the production per man-hour, and therefore double the consumption per man-hour, within a generation." This statement is especially significant when it is recalled that, because of inefficient business managements, monopolistic practices, inadequate scientific research, underinvestment in productive equipment, and oppressive taxation, the average British industrial worker today produces only about half as much in an hour's time as the average American worker.

The British voter, irrespective of whether he resides in London or

[1] For a detailed description of the development of the British war effort see the author's study, *The British War Economy* (New York: Professional and Technical Press, 1943).

Lancashire, does not expect a millennium now that socialism has come to Britain, but he does insist upon the adoption of a program which will provide him with adequate food, shelter, clothing, and employment, and afford social provision for accident, sickness, and old age. For his children he wants a free educational system, and for his home fuel, power, and light supplied under a public service policy. He looks forward to a gradual reduction in his present high taxation, and a well-conceived financial policy aimed at combating inflation.

The Labor Party, possessing a mandate which is both complete and indisputable, has based its peacetime blueprint on certain important tenets.[2] One is that the total national resources in land, material, and labor must be fully utilized, and production raised to the highest possible level. The main features of an adequate employment policy, contemplated in this aim, include administration by the state to maintain the demand for the products of industry at a level sufficient to employ the total population available for work, to direct the location of industry with proper attention to the supply and availability of workers, to ensure that industry is properly organized so that the demand for its products becomes effective in the provision of employment opportunities, to regulate the volume and character of internal and foreign trade relative to the nation's need for imports and the character of her industries, and to train workers when they become redundant in their occupations. Success in the attainment of full employment, the Labor Party believes, will be dependent ultimately on the extent to which private enterprise is supplanted by public ownership or subjected to public control.

The conception of an expansionist economy under which the state assumes the obligation of maintaining expenditure with the budget determined by the employment situation rather than by fiscal considerations was offered by the Coalition Government in a White Paper in 1944. This document represents a bulwark in economic history, as it is the first formal resolution of a democracy to accept the responsibility for preventing the total outlay of goods and services from falling to a level where general unemployment appears. The Labor Party policy carries this philosophy to a logical conclusion and affords concrete indication of how it is to be implemented.

Another important Labor premise is that planned investment in essential industries and on houses, schools, hospitals, and civic centers should occupy a large field of capital expenditure with a national investment board determining social priorities and promoting better timing in

[2] An interesting contrast can be obtained by comparing Labor's postwar program outlined in this paper and that of the predecessor Coalition Government contained in an article written by the author for the July, 1945, issue of the *American Journal of Economics and Sociology*.

private investment. Overseas investments would be controlled and encouraged, and the new financial corporations set up for industry and commerce would receive appropriate powers to place the prevailing capital issues control on a permanent basis. As for other financial plans, there is no expectation of balancing the budget in the fiscal year just ahead although the gap between expenditure and income will be narrowed. Later, when a balance has been secured, the government will follow a deliberate policy of creating surpluses in good years and deficits in depression periods in the interest of maintaining a stable economy.

The current budget represents a conscious attempt to use the taxing and spending powers of the state with the aim of influencing the magnitude of the community's income and the distribution of its expenditure. During the war the objectives of the financial plan were concentrated upon increasing the national output to the maximum and reducing personal expenditure to the minimum, in order that the largest volume of resources could be devoted to the war effort. For peace, however, the aims are different as they include the maintenance of a high and stable level of employment and the assurance that the wealth created by the fully employed community is used to the best advantage. In Britain, budgeting, therefore, has become a task of distributing scarce resources among its various uses.

The seriousness of the contemporary British financial situation is readily apparent from the following figures: In 1938 the gross domestic production of goods and services by the whole British community totaled 21,880 million dollars. By the processes of international exchange, a further 1,120 millions was added. The prospects for the immediate peace period depend on the level of domestic output and on whether international exchange will yield any net addition. Domestic output should be at least 10 per cent higher, but there may be no net addition from international exchange, and few people, in fact, prophesy that the figure of 1938 will be reached. The probability is that the total resources available for use will be larger than in 1938 by from 1 to 4 billion dollars valued at 1938 prices, or by 1,600 million to 6 billion dollars at present prices.

The foregoing represents the revenue side of the national budget. The claims on it emanate from the state's needs for defense and other purposes, the consumption of the people, and the maintenance, replacement, and increase of capital equipment of the country. The war has effected a redistribution of income from the rich to the poor, to be reinforced by extensions of social security which will serve to stimulate consumption. It seems probable that the propensity to consume income relative to the propensity to save will have been increased, and it is

certain that the absolute level of consumption will be large. This increase should not be estimated at a figure below 1,600 millions (2,400 millions at present prices) and to place it at this low level assumes that consumption increases only in proportion to the total of domestic output. There is every reason to believe that, in the absence of a policy to the contrary, the state's and the public's consumption will try to absorb the total, or more than the total, of the increase in the resources available. Under such conditions, the provision of capital will suffer, in spite of the fact that there will be an immense arrears of replacement and repair of war damage to be undertaken. The nation is already committed to very large additions to its capital. Housing alone will require 1,920 million dollars a year if 400,000 homes are to be built, and new construction must be secured in the coal mines, the steel and cotton industries, and in the transportation field. The allocation for gross capital requirements could easily be set at 4,800 million dollars (1938 money) without covering more than the first priorities.

The major aim of British economic policy must be to raise the national output but it cannot be achieved without large-scale investment of capital. Capital, whether privately or publicly owned, is the key to the whole future of the British economy. With it, the national output can be raised, resources provided for social experiments, and an escape found from the international penury which threatens to undermine Britain's strength and status as a Great Power. Britain's financial position is extremely precarious, as her external debt to September, 1945, totaled approximately 14 billion dollars largely due to her Colonies, and her internal debt about 70 billions. To the heavy depreciation of capital assets by enemy action at home there must be added the sale of British overseas assets which, from September, 1939, to June, 1944, amounted to 4,260 million dollars while new overseas debts incurred in the same period reached 9,200 millions. Neither of these figures covers the loss of assets in Empire countries which were either destroyed or damaged, to deny their use to the enemy.

It is entirely possible that the British balance of payments may deteriorate as much as 1,800 million dollars. Any attempt to estimate this total, however, is unscientific as it will depend on the state of world economic activity. Even a projection of the prewar balance into the peace period must be very tentative as it involves major factors, such as terms of trade and initial postwar exchange parities which cannot at present be forecast. Until the deficit can be eradicated from the nation's balance of payments, the only way to cover it will be by increased borrowing from abroad or by further sales of her overseas investments. In the immediate postwar period, strict control of imports, as well as

priority for export production, will be essential, and it may prove necessary to maintain and develop exports and to secure needed imports by means of reciprocal trade and clearing arrangements.

Important as it is to restore and maintain an equilibrium or a surplus in her balance of payments, Britain's primary objective is the maintenance of full employment, as she leads the world in recognizing that mass unemployment is unnecessary as well as evil, and in placing on the state responsibility for preventing it. The real issue is how far Britain may have to control her world trade so as to preserve the main advantages of an international division of labor without exposing herself too greatly to the vagaries of foreign demand for her exports. The practical question is how far she may enter into reciprocal trade and clearing agreements with the countries which are her main suppliers, in order to ensure that her exports to, and her imports from, these countries remain reasonably stable, whatever may happen to the level of demand and employment in other countries. Insistence must be placed by the British Government on effective agreement for the maintenance of full employment preceding any plan concerning the removal of trade barriers and the elimination of discriminatory methods in world trade.

Most Americans still regard foreign trade as a convenient device for exporting unemployment, not as a means of utilizing an international division of labor and, through a mutual exchange, raising the living standard. Little attention is paid to the provision of an expanding market for imports which alone would enable foreign countries to pay with their own goods and services for the purchase of American commodities and services. An effective substitute, they think, is to lend other countries dollars to buy American goods, but this course alone will increase disequilibrium. It must be plain that in no case can Britain undertake to make commitments under which unsatisfactory developments in other countries might force her to adopt a policy of deflation, repression, and unemployment. Nor can she relinquish her rights to conclude mutual, beneficial arrangements for the exchange of goods and services with other countries, pursuing policies similar to hers, until international agreements can be secured for parallel measures to stabilize employment at a high level and raise the general living standard.

Current British opinion is divided on the issue of whether the Bretton Woods Agreements should be accepted or rejected. The pertinent question is whether the potentialities of the next decade will permit any monetary scheme to work. The requirements for success are mainly two: first, that all countries of the world, and especially the economic giants, Britain and America, so arrange their external economic relations—their exports, imports, lendings, and borrowings—that their outstanding

balances may be small and manageable; second, that the great industrial nations preserve themselves from large-scale economic depressions.

One financial problem as yet unsolved concerns Britain's payment of blocked sterling balances. Repayment of this international floating indebtedness, for many years to come, would mean reduced imports, or the export of a larger proportion of her own products without receiving anything in return for the surplus. Assuming that full employment is maintained, this condition will mean considerably less goods for the British consumer, and no social security scheme, in the face of such a contraction of supply, can maintain the standard of living.

These are the complex financial problems for which the Labor Government is seeking solution through international agreement and by domestic reform. A comprehensive nationalization program for the electricity and gas industries, transport services—except coastal and international shipping—docks and harbors, and the coal, iron and steel industries, is contemplated during the present Parliament. At least four methods of state control are being subjected to close scrutiny. The first —already used in the case of the Bank of England but not considered suitable for general application—is an outright purchase of existing capital without any change in the corporate structure of the undertaking to be nationalized. The second is the public board method under which the constituent companies in a nationalized industry are grouped, on the London Transport plan, and shareholders in the existing companies are offered an exchange for the stock of the new undertaking. In considering the terms of exchange, allowances can be made not only for the different positions of individual companies but also for the differing rights of the various classes of capital. Under this procedure, the government would buy the assets of an industry, without taking over the companies themselves, paying by an annuity which the managements would be at liberty to distribute in interest and dividends to their various classes of stockholders. Lastly, the state could purchase the assets of a firm for a lump sum capital payment, the amount being calculated on the basis either of earnings or of assets. The distinction that can be drawn between methods two and three on the one hand and four on the other is that while the first two permit continuity of income or tenure by existing shareholders the latter involves the liquidation of each company. For firms incorporated under the Companies Acts, the ordinary legal consequences of liquidation would presumably apply; each class of prior charge and preference capital would be entitled to its fixed capital sum and no more, with any surplus benefiting equity shareholders.

Certain specific nationalization schemes have already been announced.

For coal, for instance, it has been suggested that state compensation might be related to the net revenues that the industry as a whole may expect to maintain in the future. If this method is finally adopted, as seems probable, unsettled questions will remain concerning such items as future costs, profit margins, and output in each district and in each pit. For coal, and perhaps for other fields, the government may be forced to seek a nationalization agreement with the industry as a whole.

Further complexities apply to home railways. These companies are statutory organizations, governed by their own Acts of Parliament which assume that the companies will maintain in perpetuity their permanent way. If the state decides to liquidate railway companies, as part of a nationalization plan, serious problems of capital priority undoubtedly will arise which can be resolved only by a High Court inquiry. Electric power and gas companies, in contrast, could most easily be nationalized along lines suggested by the second method stated above. The cotton industry will not be placed under state ownership, but will be scrutinized by working parties composed of representatives of employers, workers, and the public. These groups will concentrate attention upon improvements of organization, production, and distribution, reporting the steps which should be taken to strengthen the industry and to make it more capable of meeting domestic and foreign competition. These parties—an innovation in Britain—will also examine the footwear, hosiery, woolen textiles, pottery, and furniture industries.

The measure to place the Bank of England under state control is moderate in tone, indicating there is no intention to impose constant state interference upon the day-to-day operation of the Old Lady of Threadneedle Street, although the government, if it desires, may request information from, and make recommendations to, other British banks. The generous treatment accorded the Bank's shareholders, under which they will receive from the Treasury the same annual income during at least the next twenty years as during the past twenty, must not be taken as a precedent for other nationalization plans as future schemes may apply to institutions and industries which have operated less efficiently. In addition, state control of the Bank was simplified by the fact that there was only one class of stock outstanding whereas, when schemes for the coal industry or railways are contemplated, complicating factors arising from a wide variation of earnings and dividends in the past, problematical earnings in the future, and marked differences in the valuation of assets and in capital structure will have to be resolved.

The Labor Government has announced its intention of reinforcing home industries by suitable economic and price controls, to be imposed for a transitional period of five years. It also will pursue a comprehensive

program for the expansion of the export trade by at least 50 per cent. This, because of increased prices, actually means a 125 per cent rise in value. After international security comes the need for establishing the national economy on a sound basis, with export trade placed in a healthy condition and employment continuously maintained at the highest possible level. If full employment is achieved, however, the balance of trade must be maintained by controlled direction and stimulation of exports, and by a system of priorities for imports, which will give precedence to the essential. Controls at present operating over foreign exchanges and imported raw materials provide the foundation for a system which can regulate the balance of trade and permit home activity to rule at a level which would make it possible to fulfill the promise to abolish mass unemployment. Restriction must be maintained, also, over international capital movements in order that domestic policies may not be at the mercy of sudden flights of "hot money" which wrecked many national experiments in the ten years preceding World War II.

British exports must be mobilized for peace as for war by creating the demand to which the supply can be made to respond. The dominant factor will be the price of home-produced goods relative to those of other nations. British costs and prices were higher before 1939 than those of most other nations and they are much higher now. During the last ten years British workers have become accustomed to a standard of living which was hard to justify by its comparative productivity when it was sustained by the overseas income and other invisible exports of the country, and domestic industry has reinforced this tendency by its addiction to restrictive practices and high margins. In the course of the war, ideas about standards of living have risen, cartelism has been strengthened, and the country's competitive position has declined. Only one permanent solution offers itself in the form of such a marked increase in productive efficiency as will reconcile high wages with low selling prices.

Suggested emergency measures to ensure adequate exports in the vital transitional period include the following: first, revival and extension of the Export Group System as a means of aiding the competitive position of exports; second, differential direct taxation by which the profits on the export trade would be taxed at a substantially lower rate than those on home trade; third, continuance of the United Kingdom Commercial Corporation as an agency to fill the gaps in existing export machinery and to implement commercial agreements in the transitional peace period; fourth, negotiation of long-term commercial agreements, especially those for the sale of selected British exports, to reinforce the financial arrangements already being made with other countries; fifth, use of certain wartime controls, especially consumer rationing, price con-

trols on home sales, Limitation of Supplies Orders, and control of raw materials in short supply; sixth, indirect taxes to discourage domestic purchases of exportable luxuries and semiluxuries.

The more free and multilateral her trade relations, the more fruitfully will Britain be able to restore the indispensable commerce she voluntarily destroyed to wage the common war. The acceptability of this solution depends on America's ability and willingness to accept goods in return for goods or in payment of loans. Only thus can the possibilities be rendered realistic of a truly multilateral trade embracing this country and of Britain's being able to fulfill her obligations. Without such assurance the British Government may be compelled to combat by direct arrangement over the broadest field a multilateral though not world-wide system.

Britain might sacrifice the defensive structure of Imperial Preference if we, in turn, would abandon the protectionist restrictions which did much to bring the powers into being, but the former cannot contemplate a final settlement that leaves her defenseless against an American-made depression. As the world's largest importer, Britain can make the greatest contribution to the free flow of world trade if, in some way, she can continue to buy freely from any country which can best supply her with goods, finding in return a strong and steady demand for her own goods in all markets of the world.

It has been reliably reported that the British-American financial representatives have agreed on the proposed charter of an organization to govern world trade, designed to promote national and world-wide action for the expansion of production, exchange, and consumption of goods, for the reduction of tariffs and other trade barriers, and for the elimination of all forms of discriminatory treatment of world commerce. If satisfactory terms can be arranged for the financial assistance which Britain needs in the transitional peace period, both nations will support this charter in an international conference called to create the trade organization. It will then take its place beside the International Monetary Fund, the International Bank, and other economic agents of the United Nations Organization. Together with these, it will fall under the jurisdiction of the Social and Economic Council.

A sharp distinction must be drawn between the normal conditions that can be expected to return in a few years' time and the highly abnormal situations which will prevail until then. In the short run, the alternative to American aid is not a high trade area, for which conditions do not presently exist, but dependence on Bretton Woods alone, on what Britain can secure by hard bargaining, and on what further credit will be extended by other countries out of affection or with a shrewd eye to the future. In the longer run, there should be a favorable prospect

of building up a workable alternative to the universal system, if one should be needed. This will be true, however, only under certain circumstances: first, that the transition from the restrictive short-term to the more expansive long period be not delayed for more than a year or two (that is, that adequate supplies of British exports be offered and British accounts brought close to balance by 1947 at the latest); second, that these British goods be available at competitive prices; and third, that the strongest emphasis be placed on the necessity for expansion. For Britain more than for any other country, the basic requirements are speed in reconversion, a rapid rise in productivity, insistence on competitive efficiency, and discovery of practical means of combining control in the interests of progress. Unless these requirements can be met, Britain's international economic relations will long remain in a highly unsatisfactory state, irrespective of the system of commerce which is adopted.

One aspect of the trade situation is concerned with the increase of home production of foodstuffs and improvement of distribution of basic foods at fair prices. All land resources eventually will be nationalized by the Labor Government with fair compensation and with a revenue from public funds provided for betterment. As a first step, state and local authorities will be provided with wider and speedier powers than they previously possessed to acquire land for public purposes where the national interest dictates. An urgent problem is to increase the number of houses available in town and country areas by effectively organizing the resources of the building and corollary industries. Serious criticisms of the government's construction program are that the Minister of Housing has left the provision of all materials to private firms, local authorities are apparently to be given no special financial aid at low interest rates by the Treasury for extensive builidng projects, and no assurance has been given by the Minister of Labor that sufficient workers will be provided.

It is the intention of the Labor Party to place the Education Bill, enacted by the Coalition Government, in legal force and practical effect, including the raising of the school-leaving age to sixteen, and free secondary schooling. Legislation extending social insurance over a wide field to cover every individual will be introduced as well as indemnity for industrial injuries and a national health service. Labor's aim is to provide a national minimum standard below which no citizen will be permitted to fall. Subsidy payments will be continued to keep living costs stable. The wartime subsidy program contributed materially to the nation's relative freedom from strikes and, by helping to prevent the constant upward climb of wages and prices, it has proved a useful weapon against inflation. But the cost has been heavy and constantly

increasing, reaching in the current year approximately 900 million dollars annually—almost exactly half the current cost of the national debt. To maintain indefinitely the price level of the main items of the cost-of-living index while the general price level and wages continue to rise will place a heavy cumulative strain on the budget. If cumulative inflation is to be avoided, higher wages unaccompanied by increased productivity can only be offset by a rising cost of living.

Serious difficulty will hardly be encountered by the Labor Party in securing public support of the program of proposed legislation outlined in the preceding paragraphs, but its political and administrative prowess are as yet untried. Unfortunately, the present cabinet is unwieldy in size and its agenda is badly congested. In the absence of Cabinet decisions, departmental ministers are striving to achieve desired objectives although they tend to impede each other. As one instance, while the Board of Trade attempts to maximize production and exports, the Ministry of Labor, constantly pressed by the service departments for more workers, still calls up irreplaceable skilled workers in key sections of industry. In view of this critical situation, the Labor Government appears far too oblivious of the vital fact that in many cases, the longer it takes to announce the general lines of future policy, the more difficult it will be to impose a socialist solution.

One of the major deficiencies in Labor policy is the lack of a national wage policy. The average level of wage rates, totaling 100 for October, 1938, reached 138–9 in January, 1945, while average earnings for all workers, at the later date, amounted to 176. The absence of a definite policy during the war did not have too serious consequences because of the application of Treasury subsidies to keep down the cost of living and because of the agreement of workers to submit their disputes to arbitration. Evidence has been given, however, that the moral and legal restraints on the normal process of bargaining are to be removed as well as wartime labor controls. This situation will permit each section of workers to press for its own wage claims, irrespective of the cumulative effect on the national economy.

Under the present socialist government, every factor in the national economic life, it appears, will be planned and controlled, except the most fundamental aspect—wages. At the last meeting of the Trade Union Congress, amalgamating body for British unions, except for a resolution calling for the incorporation of the guaranteed week in all wage agreements and the legal enforcement of wage agreements reached between employers and unions, no mention was made of the relation of wages in one industry to wages in another. Perhaps the least that can be expected in the next few months is the stabilization of wage rates, not earnings, in the munitions industries, and some rise in the civilian

and export industries. Such a policy will be more readily conceded if unionists realize there are only two alternatives to it; namely, a retention of labor direction through Essential Work Orders, and the abandonment of any attempt to achieve a coherent economic pattern for the nation.

The postwar aim of full employment will demand greater labor flexibility, mobility, and adaptability than has ever been conceded by British unions in the past. The Labor Government's ability to cover the rising cost of social insurance will depend on the rate at which the national income can be increased, with this figure in turn contingent upon the trend of the population, the expansion of productive capacity, the reconstruction of foreign trade, and the extent to which consuming power can be maintained. This formidable task will necessitate the abolition of any industrial arrangements by which prices are stabilized at the expense of output and employment, and the removal of all trade union obstacles to an expansionist economy.

Labor is charting an experimental economic, social, and political course involving more drastic modification of the traditional English way of life than has been attempted by any previous government. The next five years of its achievements are fraught with immense responsibility and possibility. A review of the achievements of this parliamentary period may well compose a splendid chapter in the nation's history, but it remains to be seen whether it is written with the daring strokes of socialist pens or with the more restrained hands of Tories.

Certainly the first moments of peace cry out for change, and the Labor Party has announced its determination to make the most of them. Reconstruction of the British economy, however, will require the stoutest hearts and the best minds of the nation, and the dedication of every personal resource to achieving a thoughtful and efficient pattern of national and international aims.

Britain envisages, perhaps more clearly than any other country, that if anything substantial and permanent is to be accomplished to strengthen internationalism, definite progress must be made in the economic sphere. The case for economic planning today is accepted as the means of raising the standard of living of backward countries and of eliminating mass unemployment for mature nations. But it is increasingly evident that a sound economic policy must rest upon, and be reinforced by, a sound political philosophy if a lasting peace is to be attained. In addition, there must be some fundamental knowledge of the political conditions underlying and affecting economic adjustment. This last objective can be accomplished by widening international understanding of, and collaboration upon, every aspect of the postwar economy—not only on currency, relief and security, but also on the

control of cartels, the development of aviation, and the expansion of employment and trade.

Perusal of the thoughts expressed in this paper should reveal that the British and the American economies are no longer dedicated to the same purposes. The British people, for instance, are rapidly moving toward a planned regime and deliberately setting out to maintain a high and stable level of employment while our aim may best be described as attempting to avoid slumps. In the domestic field, also, Britain's course is planned to attack the whole question of underspending by a further redistribution of the national income, through improved social services and other measures, and by stimulating both public and private enterprise. It recognizes that the state, in fulfilling its part in maintaining full employment, must hold a larger role in the economic field than it has at any time in the past. Opinion on this side of the Atlantic, however, tends to regard government intervention in private enterprise as a cause of unemployment, and to rely on free enterprise to prevent slumps.

Turning to monetary questions, a large section of British opinion supports the view that if, in order to prevent or correct a general fall in employment, it is necessary to permit the budget to go unbalanced, it is permissible and even desirable to follow this course. Some authorities even go so far as to argue that a perpetual growth of the national debt is perfectly compatible with sound economics provided that it does not surpass that of the national income. To many Americans, however, budget deficits are a curse; sound money to them means balanced budgets.

In world trade the war has brought to Britain a much greater degree of state planning than has been experienced to date here in America. There are indications, also, that planning in the former country has come to stay. The Ministry of Food, for example, is negotiating long-term buying agreements of some of the nation's main foodstuffs, and there is a marked trend in public opinion toward some type of complementary selling agreements. The British people regard imports as desirable in order to maintain and raise their standard of living, and the need to pay for them with exports as constituting a problem, while we consider exports as desirable in themselves for the provision of employment, and the need for receiving payment in the form of imports as representing the difficulty. This marked divergence of opinion on the immediate functions of imports and exports, and on other international economic questions, represents a grave potential source of danger to amicable Anglo-American understanding.

The possibility of attaining international agreement on employment policy rests largely on the possibility of whether America and Britain

can reach an understanding on this and correlated issues. There is no disagreement as to ultimate aims, as these were enunciated in the Atlantic Charter and the Mutual Aid Agreement. These two documents, however, failed to indicate fundamental divergent opinions as to the methods of achieving mutual aims, especially relative to the course which would constitute an appropriate financial policy and the international procedures which could be considered adequate for maintaining effective demand. Britain is faced with the problem of insisting that effective international agreement on the maintenance of full employment—a totally new doctrine involving a totally new approach—should precede any schemes for the removal of trade barriers and the elimination of discriminatory methods in world trade. Every effort must be made to secure the widest possible discussion of commercial and employment policy, for many of Britain's postwar economic aims, such as stable prices, maximum employment, and cheap money, are not accepted by our government.

In her platform for the future, Britain affirms that world peace and world prosperity are indivisible—that they must be sought for their own ends as well as for the benefits they bestow. All of her citizens are actively searching, at the inception of the new year, for the basic tenets of a revitalized economic approach to the solution of pressing national and international problems.

The sheer strength and applicability of the new economic premises conceived by the British people and their government should stimulate study in this country of the issues involved. As almost the sole remaining devotee of private enterprise, the United States is especially challenged to decide whether these premises merit acceptance because of their contribution to the solution of society's most blatant inequities or rejection because of the drastic changes they entail in human behavior or in economic and social development.

THE FUTURE OF THE GERMAN ECONOMY

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I

It is not easy to analyze the problems of the organization of the economy of a defeated enemy country immediately upon the close of a war. It is unusually difficult to do so after a war as terrible as the one just ended, when the defeated enemy began the war out of premeditated purpose and when the ordinary rules of warfare were so ruthlessly violated by him. However, I suppose it is particularly expected of the economist that he should be able to put emotion aside and to exercise whatever mental powers he may have without hysteria. I cannot pretend to have dispensed with emotion but I shall try not to be hysterical.

In considering the future of the German economy I suppose I am expected to make what amounts to a long-term forecast. Since it would, however, require a Hindu swami rather than an economist actually to make such a forecast I shall take refuge in the device which the economist habitually employs when in this particular quandary. I shall try to sketch out the basic elements in the present situation. In that way, each can make his own forecast and may even fudge a little by altering the forecast from time to time when events do not seem to be fitting the projected curve.

The future of the German economy obviously depends in the first place upon the physical status of the economy when the Allied occupational forces took over, secondly upon what the occupying powers do with the German economy from that time on, and finally upon what the German people do with their economy under the circumstances existing as defined by the first two factors.

What was the physical condition of the German economy when it was taken over by the occupying forces? In one respect it was materially better than had been generally believed. German industry had *not* been nearly as badly damaged by air bombardment as had been reported. Largely because German industry was located on the periphery of the cities and because of a policy of dispersal of industry, both area bombing and so-called "precision bombing" had caused less complete destruction of industry than had been reported. The destruction in the residential and business areas of cities was, however, truly catastrophic.

The fact that industrial destruction had not been as great as expected produced a monentary but extreme reaction which resulted in a few wild newspaper accounts that German industry had begun to operate on a boom scale immediately after the occupation. Actually the facts

are to the contrary. German industry, particularly in the American zone, is operating at only a tiny fraction of normal production. What that fraction is is not easy to say but so far as I know it is less than 10 per cent. In the British and Russian zones the rate of operation is probably considerably larger but still less than 25 per cent, I should think.

The immediate cause of this low rate of operation is shortage of coal. If there were no other causes, this shortage of fuel would prevent the level of industrial production from being anything nearly adequate for even the most limited sort of economic existence. The shortage of coal is due to causes which are in part temporary, such as manpower and transport shortages. Consequently if coal shortages were the only reason for the low level we might well expect industrial production to increase very substantially during the next couple of years. Coal production is still only about 40 per cent of the normal rate but it has improved substantially since the 10 per cent level which characterized the production of the Ruhr last summer.

Fortunately German agriculture had not suffered greatly in the area of occupation of the Western Powers. When one remembers that the collapse of the German Army and the fighting in Germany came during the growing season for crops, it is amazing that in the *Western zones* the harvest this year was apparently some 85 to 90 per cent of normal.

It does not follow, however, that the food situation in Germany is anything but extremely serious. (It will be remembered that Germany was some 80 to 85 per cent self-sufficient in food production before the war.) The very large Russian Army of Occupation in Germany has had to be supplied out of the current harvest as well as the smaller French Army. The British Army of Occupation in the main and the American Army almost entirely have brought in their own food supplies. The net immediate result has been an official diet of 1,550 calories per person for German civilians and that diet has by no means always been maintained. It has been maintained by means of quite substantial imports of wheat and flour from the United States. This diet is much below the minimum necessary for health while doing normal work. What is much more serious from a longer-time point of view, as will be discussed later, the agricultural situation is exceedingly difficult because a population not much below that of 1939 must be supported in a "Rump Reich" which under the Potsdam Agreement has lost an area producing 25 per cent of German food supplies.

So much for the condition of the Germany economy as the occupying powers found it. In spite of war damages, catastrophic as these were, I feel quite sure that had there been no serious political problems, the restoration of a sound Germany economy, integrally intermeshed with the economies of other European countries, might well have occurred

within, say, ten to fifteen years. If there had been no fear of the recrudescence of German military might, if there had been no policy of revenge, substantially all German cities would have been largely rebuilt and a reasonably prosperous economy would probably have been in existence within a decade or so. Such a restoration of the German economy does not, however, seem a probability on account of political reasons and the uncertainties connected therewith.

It is difficult enough to deal with economic uncertainties but when one moves into the political realm the future of the German economy can be described only in the phrase, "an enigma wrapped in a mystery," which Churchill used to describe Russia. How long the Potsdam Agreement will determine the political and economic policy of the occupying powers it is impossible to say. Strong forces are at work which would still further emasculate the principle of treating Germany as an economic unit enunciated while simultaneously honored in the breach at Potsdam. Furthermore, many of the principles laid down at Potsdam are complicated, confused, and vague. Yet the pattern of the immediate future for the German economy *is* now being worked out, however awkwardly, according to the Potsdam formula.

II

According to the Potsdam formula, reparations, disarmament deindustrialization, and standard of living in Germany are hooked together in a complex fashion. It is not feasible to go into a lengthy discussion of this complicated arrangement. A comprehensive policy of deindustrialization is laid down which provides that all capital equipment except that necessary for the maintenance of a minimum standard of living is to be made available for reparations. This minimum standard of living is defined as one not in excess of the average standard of living of other European countries, excluding the U.K. and the U.S.S.R. (I should say that it is a vast oversimplification to state the matter in this fashion.) The Potsdam Agreement further provides that de-industrialization shall be carried out primarily in the heavy industries, including steel and chemicals.

A period of six months was allowed for arriving at an estimate of the amount of industrial capital equipment which was to be retained to insure the maintenance of the minimum standard of living and for listing the industrial capital equipment which would be available for reparations. One can imagine the economic, statistical, and engineering problems which this task involves. Aside from other difficulties one can understand that it is not a simple task to say how much capital equipment would be necessary, after stripping down an economy, to support

a given general standard of living, even if there were to be no change in the character or variety of the capital equipment.

It is impossible here to outline the crude methods which had to be used to tackle the problem. Suffice it to say that on the basis of the best estimates the American economists who were working with the Control Council on the problem in Berlin last summer could make, it would be extremely difficult under circumstances likely to exist to produce the national income required by a minimum standard of living while at the same time stripping Germany of heavy industries. In this conclusion the British economists concurred. The French economists took much the same point of view. While the Russians insisted on a larger degree of de-industrialization than the economists of the other powers believed feasible, even they did not insist on the eradication of German heavy industry.

It has been announced within the last couple of weeks that the representatives of the occupying powers on the Control Council had agreed on a *rate* of steel productions for Germany of 5,800,000 tons per year and had agreed on a capacity of 7,500,000 tons per year. Later dispatches, however, raised doubts as to whether there had really been a meeting of minds with respect to steel production capacity which was to remain in Germany. An order of magnitude for purposes of comparison with this 7,500,000 tons of allowed steel capacity is afforded by the 18,500,000 tons of steel capacity which existed in Germany in 1929. This was a year of strong business activity but relatively little steel was being used for armament purposes. By 1939, when preparations for war were going full blast, this steel making capacity had increased by some 30 per cent. This allowed capacity may also be compared with that of the United States which is around 95,000,000 tons per year.

A large number of industrial plants have been declared surplus and available for reparations in the Western zones of occupation. It is my understanding that some of these plants are being got ready for removal as reparations and will be moved as soon as it is decided definitely which plants are to go to which countries. Removals in the Russian zone have been carried on from the beginning of occupation. No problem of division between countries exists in the Russian zone except between Russia and Poland and that is not likely to cause any difficulty.

III

What are the prospects for developing German economy during the next decade or so which will be stable and viable enough not to constitute a serious drag on European economic recovery?

There is one major favorable factor. This is that the German economy

will not have to support a German army or armaments industry. Since after 1933 such a large fraction of the national product was taken for this purpose, the gain which accrues to the German economy from the absence of this burden is very substantial.

The unfavorable factors appear, however, heavily to outweigh this favorable factor. These unfavorable factors may be listed as follows:

1. The loss of territory. This means that a population almost as large as that of 1938 must be supported on an area producing only about 75 per cent as much foodstuffs. This is the result of the loss of territory, combined with the expulsion of German population from Czecho-Slovakia, Poland, Hungary, Austria, and Germany east of the Oder-Neisse line.

2. The drastic reduction in heavy industry. It was in the heavy industries and those industries directly dependent upon them that German comparative advantages in production were most pronounced. As the Potsdam Agreement is being worked out, not only raw steel production, but the production of machinery, of machine tools, of automotive equipment, and of fabricated steel goods in general is to be stripped down. Likewise the railroad system, including both rolling stock and installations, internal shipping (any merchant fleet or facilities for constructing a merchant fleet to be used in foreign trade are to be completely eliminated), electric power producing capacity, and the telephone system are to be stripped down to correspond to the reduced economy permitted.

The total elimination of industrial capacity for the production of synthetic petroleum products and of synthetic rubber is, however, probably not economically disadvantageous. If it is possible to develop a sufficiently large export trade it would probably be cheaper for the German economy to import petroleum products and crude rubber than to produce them synthetically.

3. The difficulties of developing sufficient exports to pay for essential imports. If these imports are not to be gifts they must be paid for. The loss of territories means additional food imports. The prohibition of heavy industries means that exports are decreased and necessary imports increased. For example, if the production of locomotives, trucks, and ball bearings is not allowed they must be imported. If the textile industry is expanded in an effort at compensation, either imports of cotton would have to be increased or the synthetic fiber industry would have to be expanded. But the production of synthetic fibers depends upon the existence of a chemical industry. Likewise, if fertilizers cannot be produced by the chemical industry they must be imported.

4. The difficulty of expanding exports of goods the production of which might be increased to compensate for the loss of other exports. If

one assumes that the exports of textiles, ceramics, toys, and glassware, for example, were greatly increased it is doubtful whether these could be sold on the international market without great opposition. The British economists quite honestly admitted that they would have to take a very "dim view" of any considerable expansion in exports of German textiles. This difficulty will be accentuated by the inevitable unpopularity of German goods and merchants in the world, and by the loss of German commercial assets and connections throughout the world.

5. Financial and monetary chaos in Germany. I leave this to the imagination rather than to attempt to describe it. It is not quite as bad as you could imagine but it is assuredly bad enough.

6. General political and economic uncertainty. One can hardly imagine the state of demoralization which exists in Germany today. The division of the country into zones, the failure so far to set up a central administration, the uncertainty of whether the economic system is to be collectivistic or capitalistic, or the one in the Eastern zone and the other in the Western zones gives you only an inkling of the psychological frustrations which grip the Germans. Denazification presents additional difficult problems, but judging by previous experience in Russia, these need not be expected to have, by themselves, too serious permanent results.

Uncertainty with respect to the territorial limits of Germany (whether the Ruhr and the Rhineland are to be lost, whether several independent states are to be set up) is likewise a factor in hampering economic reconstruction.

7. The difficulties of maintaining the armies of the occupying powers. These constitute a problem which requires a longer explanation than is possible here.

IV

All this amounts to saying that the prospects for a stable German economy are not bright. One point of view would hold that the blacker the prospects for the German economy the brighter for the rest of the world. Undoubtedly the most substantial cause of unfavorable prospects for the German economy is the inevitable hatred of the Germans throughout the world and the understandable but almost psychopathic fear that the world feels that German economic revival would mean the revival of the German military threat.

There are honest differences of opinion over the extent to which the revival of the German military threat is possible under present circumstances or those likely to exist in the future. Certainly it is not surprising that the threat of such a revival should not be considered lightly. On

the other hand there is no use to expect that European economic reconstruction will not be seriously hampered by the failure of Germany to revive economically.

Before anything like economic stability can be attained, however low the standard of living may be, the first necessity is to decide *whether there is going to be a Germany* and if so what the territorial limits of the country are to be. It is not necessary to explain to an audience of economists that it is necessary to have some sort of government to determine property rights, to decide upon fiscal policy, to provide a medium of exchange, to set up the rules by which commodities may be imported and exported, and the like. All these matters, if they are being dealt with at all, are being handled by a confused combination of authority exerted by the Allied Control Council, the Zone Commanders, and the local German governments set up by the occupying powers. On many of these matters no decisions have been made and no one knows as yet what the permanent governmental authority will be.

V

Following the territorial curtailment of Germany in the East, the French are demanding that the Ruhr and the Rhineland be separated from the rest of Germany. Until their wishes are met the French apparently are determined not to allow the reconstitution of any sort of central political or economic governmental machinery.

The carving up of Germany among adjacent powers is, of course, repugnant to the principles for which the war was fought. Consequently any further dismemberment would seem only to increase the wrong. If, however, Germany, without annexation by other countries, could have been split into four or five independent parts which could have then been allowed to join some sort of economic United States of Europe there would have been weighty economic arguments in favor of it. That is impossible now. Germany has in fact been partially dismembered. It is possible that a still further dismemberment such as the setting up of a Rhineland-Ruhr republic might lessen somewhat the fears of a German military revival so that destruction of German heavy industry could be somewhat less than it otherwise would be.

The success of such a further dismemberment would depend upon factors the analysis of which would require a volume. It would almost certainly be a failure if actual administration by a multipower council were attempted. General responsibility and determination of broad policy by the United Nations, while permitting a German administration separate and independent of Berlin, might be feasible. From a long-term point of view this solution would depend for its success upon

the elimination or at least substantial reductions of trade barriers in Europe.

Some sort of settlement which will not envisage the long continued use of large numbers of American occupational troops must obviously be envisaged. The first requisite of a situation normal enough to preclude the need for large bodies of occupying troops over a long period is some degree of economic stability. This does not now exist nor is it likely to exist until basic economic and political decisions not yet made are arrived at by the occupying powers. These decisions must not be much longer delayed if Europe is to have a reasonable chance to settle down.

There is no slick formula which will solve the German economic problem. I am convinced that an economically and politically unstable Germany will be a constant drag upon European economic and political recovery. Under present policy, or perhaps absence of agreed-upon policy, such economic and political instability in Germany seems a strong probability. I very much fear that for the next couple of decades we are going to be plagued with the German economic problem. If the problem is to be solved at all it will be solved by a policy which deals *positively* rather than *negatively* with the German economy.

DISCUSSION

JOHN D. SUMNER: One who comments on Professor Remer's paper on "Economic Reconstruction in the Far East" may choose between a wealth of interesting topics. In my own case, I must first express general agreement with his remarks; what I have to say is by way of supplement.

Mr. Remer refers to a matter of the utmost importance; namely, that economic development in the Far East must be considered in its political and social environment. In emphasizing this view, I should like to call attention somewhat more specifically to the interrelations between economic and political and social factors. We sometimes forget that any phase of economic development may importantly modify the political and social structures of the area in question, and that such modifications will, in turn, react upon economic events. Economists interested in foreign economic development must, therefore, be concerned not merely with the political and social setting within which such matters as changes in the standard of living and national income are determined, but with the influence of these changes on political and social organization.

This problem is particularly complex in the Far East, where many areas have been comparatively isolated from patterns of social organization developing in the so-called "Western" countries. That isolation is rapidly diminishing. Far Eastern countries are faced, therefore, with major problems in adapting old political, social, and economic structures to forms comparatively new to them; parenthetically, it may be predicted that Western nations will confront similar problems of adaptation.

Consider the problem of agricultural as contrasted with industrial development, referred to by Professor Remer. I believe most economists would take it as self-evident that the matter is not one merely of a choice between agricultural and industrial development but rather is one of relative emphasis. In the case of a country such as China, we may hope for the accomplishment of three major objectives: (1) the achievement of a rising national income; (2) an increase in the standard of living of people generally—an objective somewhat different from the mere achievement of a higher national income; and (3) the establishment of economic conditions which will contribute internally toward democracy and social unity, and externally toward international collaboration.

Agricultural development includes measures which increase the productivity of land, and others which relate primarily to the redistribution of wealth and income. Some measures, such as irrigation, the increased use of fertilizers, crop improvement, and agricultural education, can contribute much to a rising productivity. Such means are generally more important than mechanization in heavily populated countries, where farms are small and labor is desperately cheap. Other measures, including the reduction of absentee ownership and rents and improvements in tax structures and administration, may be thought of primarily as devices which change the distribution of wealth rather than increasing productivity as such. This assumption must be qualified, for such changes may increase productivity

even though this is not necessarily the result. A higher standard of living may well increase output, either by greater incentives to farmers or through an increase in their ability to purchase fertilizers, farm animals, or simple tools. A further factor, of considerable interest in the Far East, is that a reduction of absentee ownership may result in the increasing use of private savings for industrial development, as contrasted with their historic use in land purchase or other types of socially nonproductive investment or hoarding which do not generally increase the national product. The Far East is seriously handicapped by a lack of the machinery of investment and of experience in its use. In China, for example, one finds but a handful of companies with more than a few dozen stockhloders.

Despite the great political and economic significance of agricultural reform and development, an early industrialization is often thought of as the chief means by which a predominantly agricultural country can increase its national income and standard of living. If the objective of industrialization is to increase not merely the aggregate national income but also the standard of living of masses of the people, it is necessary to examine closely certain phases of an industrialization program. An important question is how the output of such industries will be diffused among laborers and peasants. Such diffusion may be direct, indirect, or virtually nonexistent. If, for example, industries are created in China to produce commodities for export, the initial effect on the people is the provision merely of factory employment, perhaps accompanied by a decline in the production of goods for domestic consumption. The proceeds of such exports may be used to import military articles, industrial equipment, or consumption goods. In this process consumption may be increased directly or indirectly. But consumption may decline due either to the use made of imported goods or to the comparatively inferior use of resources diverted to export industries.

Moreover, the standard of living will not necessarily rise, even if resources are devoted to industries of comparative advantage and imports are used ultimately for consumption purposes. Unfortunately for the Far East, the hand of Malthus writes all too clearly.

There are many additional aspects of industrialization which should be referred to. Among them is the problem of directing investment into channels which will increase the national product as against projects which are designed merely to increase national self-sufficiency. Other questions have to do with the scope of state as contrasted with private enterprise, and the types of joint undertakings between the government and private ownership, whether domestic or foreign. The presumption is that an extreme concentration of economic power, whether in private or in governmental hands, may adversely affect future political and economic development. We have already seen how in Japan a high concentration of private ownership became a tool or partner of militaristic aggression. Moreover, it may prove difficult for democratic procedures, in the American sense, rapidly to develop even if governmental authority is motivated by a desire to foster the welfare of the people rather than the military power of the state.

Substantial investment opportunities exist in the Far East. They call for the employment of all available capital resources, whether private or governmental, domestic or foreign. If, however, the authority of the state is used in such manner as closely to control all aspects of industrialization, the result may be to discourage the full utilization of private resources whether domestic or foreign. It would be unfortunate, to say the least, if investment were retarded by an excess of political control, however well intentioned.

The implicit thesis of these remarks may be summarized as follows: An improvement in the economic welfare of Far Eastern peoples is necessary, not only for humanitarian reasons, but also to provide an effective basis for democratic political institutions. The absence of such institutions is dangerous to world peace, and is inimical to the economic as well as to the general welfare of the people of the Far East. In view of the close relation between economic and political events, the development of democratic institutions is dependent upon adequate changes in both political and economic affairs.

HORACE BELSHAW: Instead of commenting on Professor Remer's comprehensive paper as a whole, I shall confine myself to a brief analysis of the subject discussed in its concluding pages: the main elements in the long-range problem of economic development. Any broad generalization must, of course, be qualified, when applied to particular areas.

The great majority of the population of the Far East are agrarian. Hence the problem of reconstruction is in large measure a problem of improving rural welfare. The more radical groups to which Professor Remer refers are right in their emphasis on agrarian reform. But this is far from meaning that policy should be concentrated on rural conditions. Indeed, the effectiveness of a direct attack is circumscribed by the general condition of the economy as a whole, and the most effective approach even to the problems of agriculture may be through other sectors of the economy. In this the industrial planners are right, if industrialization be interpreted broadly enough. There need, however, be no conflict between the two approaches. What is required in an area is a co-ordinated program. But there is more likely to be political resistance to agrarian reforms which appear to challenge the vested interests of the landlord, the money lender, and the dealer, while industrial plans may have a grandiose appeal and open up new prospects of political and economic power. It is therefore well to emphasize the basic social, political, and economic significance of the agrarian problem in practically every Far Eastern country.

The essence of the problem emerges from the pressure of population on the land in consequence of which holdings are small. It is a problem of rural overpopulation but not necessarily of overproduction of farm products. Predominantly, the farm economy is one of subsistence farming at a low standard of living (though in China, for example, up to 50 per cent of crops seem to have been sold before 1938), with some production for the market to buy cheap manufactured consumers goods. The surplus avail-

able per farm worker or per holding to meet the needs of nonfarming populations is small, and the income available to purchase services or manufactured goods is meager. Such a situation inhibits the extensive development of manufacture for there is insufficient purchasing power to sustain it. The smallness of holdings precludes any extensive mechanization, while the low income of the farmer discourages the purchase even of machines which might be suitable. As a consequence, reinforced by conservatism, there is a disincentive to invention and manufacture. Low income not only hinders capital accumulation but also undermines the farmer's bargaining power and renders him an easy prey to rack-renting, usury, and exploitation by middlemen. Where, as in the sugar areas of the Philippines, commercial crops were grown under tenantry on large estates, the position of the farm producer may be no better. He may, in fact, have the disadvantage of a less wholesome and varied diet. We may interpolate that, when crops are produced for export on a world market, especially those with a long gestation period, such as rubber, we run into a new set of problems on which it is not proposed to comment, except to indicate the probability that the question of commodity controls, so far not satisfactorily answered, is again bound to trouble us acutely.

One important element in the situation to which many national planners in the Far East seem reluctant to give the attention it deserves, is the tendency for improved production to be taken out in increased population so that standards of living rise very slowly, if at all.

Three approaches are indicated: (1) agrarian reform by methods directly applied to the rural economy; (2) occupational redistribution through "industrialization"; (3) population policies.

There are at least five directions in which agrarian reform may be attempted.

An important requirement is to open up new areas by TVA schemes or other methods where lands are available. This is not inconsistent with the view that there is rural overpopulation, since its main purpose would be to spread a given rural population over a wider area, and supplement land as the scarce factor. From this scarcity derives in large measure the scarcity of another factor—capital in the form of implements.

Especially where there is a tendency towards one-crop farming, it should be a matter of public policy to encourage a greater diversity of crops with a view to improving the diet of both rural and urban populations. For example, this might well be an important desideratum of land reform and rural reconstruction in the sugar area of the Philippines.

Of paramount importance is the reform of rural institutions, in order to increase their efficiency and eliminate exploitation. Such would cover, *inter alia*, consolidation of holdings, reform of tenure, and of credit and marketing services. The development of co-operatives may achieve much, but in most cases governmental measures are imperative if improvements are to be at all substantial.

Incidentally, the racial antipathy in colonial areas to which Professor Remer refers is intensified by the fact that landlords, creditors, and factors

are often foreigners who derive an excessive return for their services even when risks are allowed for. But the services are essential and for some time are frequently not likely to be efficiently performed by the indigenous population. The immediate problem then is so to organize or regulate the performance of necessary services as to prevent unconscionable rewards.

Finally, attention must be given to traditional attitude and beliefs. This implies not the general imposition of Western value judgments on oriental peoples but certain minimum modifications in existing attitudes which impair efficiency. As long as the cow is sacred it will be difficult to improve breeds and standards of husbandry. As long as there is large and ostentatious expenditure on a feast or a celebration, the problem of over-indebtedness will plague the peasant and the craftsman. Fundamental beliefs and attitudes are likely to be strongly resistant to change but it will be a mistake to ignore their implications in terms of economic reconstruction.

It seems clear that the development of agricultural education and extension services are of prime importance.

Occupational redistribution through "industrialization" is necessary to development and improved living standards not only through its direct effects in increasing the supply of manufactured products but also through its indirect effects in drawing workers from the land. So much has been written about this that one or two observations must suffice:

1. Insofar as occupational redistribution occurs it will not only increase the volume of consumers goods and probably cheapen their price but also be conducive to a larger farm income because demand for farm products will be larger and holdings somewhat greater than would otherwise be the case. It does not by any means follow that larger holdings will result in reduced output.

2. It is a mistake to think of industrialization simply in terms of manufactures. In most areas improvements in transport and warehousing and marketing facilities may be equally important. Incidentally, such improvements may be conducive to greater efficiency by permitting greater regional specialization, as in China. This is not necessarily inconsistent with the suggestion that crop programs should take account of nutritional requirements.

3. Equally it is a mistake to think of industrialization entirely in terms of increased concentration of industry in large urban centers. There is much scope for small industry decentralized in rural communities or small urban centers; and this will often bring substantial advantages in supplementing farm income, providing seasonal employment and economizing in transport costs.

4. Nevertheless, with industrialization, further urbanization is bound to occur. This presumes a responsibility to make prior plans for housing, utilities, amenities, education, social services, and the like, if existing evils are not to be exaggerated.

5. It is a matter for consideration whether simple machines of the order of the sewing machine, the bicycle, or the wheelbarrow, cheap tools and household requirements may not be the type of capital equipment most

conducive to an early and substantial improvement in the efficiency of the farmer and the craftsman and to living standards of the mass of the people. It may well prove to be a mistake to concentrate overmuch on heavy industry to the detriment of the more humble types of capital equipment and consumers' capital.

6. Capital demands for long-term development will be too great to be met out of the resources of Far Eastern countries. Moreover, it is unlikely that sufficient finance will be available from elsewhere to meet the needs even of the ambitious plans already formulated. This increases the necessity for a careful selection of projects and for controlling the temptation to use inflationary methods as an alternative to borrowing from abroad. There is no scope in this brief note to discuss either the desiderata of foreign investment policies and programs or the implications in terms of international trade.

7. Policy in relation to Japan should take account not only of the effects of a resuscitated Japanese trade on the development of industry in other Far Eastern countries, but also of the fact that Japan is likely to be the cheapest source of supply of many consumers goods, implements and tools for some time to come. By and large a revived Japanese trade is in the interests of the Far East.

8. An existing impediment to development in the Far East is a shortage of technical and administrative personnel. In some countries, as for example, China and Korea, this applies to government as well as industry. Among the most imperative needs, in respect of which international assistance may be of great value, are the provision of personnel, and assistance in organizing recruitment and training.

An argument sometimes used in favor of a rapid and substantial program of industrialization is that it would lead to a quick improvement in living standards; and that, as in the West, this would lead to a limitation in size of families. One entertains some doubts as to whether this is likely to occur. The prospects of an improvement which is both rapid and substantial do not seem very great, while attitudes towards sex, religion, and the family do not seem likely to change overnight. Moreover, population increases may even frustrate attempts at agrarian reform by increasing competition for land which offsets the effects of enlarged areas and occupational redistribution. There is the need, therefore, for an extension of knowledge of birth control and educational propaganda if population pressures are not to continue to absorb all or the greater part of the fruits of development.

WARREN S. HUNSBERGER: So much of importance is compressed into the short space of Dr. Tamagna's paper that comment should be restricted to major matters. I have no major criticism to make. It is impressive to see an acceptable treatment of both Chinese and Japanese finance in a single paper. Dr. Tamagna's success is partly the result of his discussing financial matters not alone but in their economic and political context. This treatment clarifies and sharpens the contrasts between China and Japan.

One of the most significant points in this paper is its emphasis on the

proper relations among financial institutions and techniques and other inextricably intertwined aspects of life—commercial, industrial, agricultural, social, and political. The point that China has had difficulties arising from the lack of administrative tools applies to all other of these fields as much as to finance. Again, the warnings that China may try to go too far too fast and that Japan has an overexpanded machine for the restricted area and functions left to her apply not alone to finance. If China is to take advantage of her new opportunities and if Japan is in fact to adapt herself to the terms of announced Allied policy, then financial adjustments in each country must proceed *pari passu* with other related adjustments.

With this necessary setting in mind, we may dwell briefly upon some of the contrasts between China and Japan suggested by Dr. Tamagna. China, one of the victors in the war, finds the advantages of victory reduced by a fundamental internal conflict which has recently brought open civil war, by the discrediting of her currency, and by the need for foreign assistance in relief, reconstruction, and economic development. Japan, on the other hand, although overwhelmingly defeated in the war, retains for the present her government, and a remarkably large part of her basic social, political, and economic structure, including the machinery for administering or dominating many areas beyond her home islands.

The future for China includes the prodigious problem of developing a land which has thus far largely defied modernization, except in individual areas and activities under foreign control. This problem is a creative, constructive, and positive one which cannot be solved easily. Japan's future adjustments are initially destructive, restrictive, and negative: to disarm; to pay reparations; to eliminate military activities and reduce related activities; to adjust her economic, social, and political life to these restrictions; and to accept such other limitations and controls as the Allies may impose. The Allies, through the Supreme Commander for the Allied Powers in Tokyo, have already taken steps the completion of which will do much toward bringing about the new circumstances under which Japan must live. If the full details of the Allied program for Japan were to be made known to the Japanese fairly soon, it is not unlikely that they would be able to adjust to this program with success similar to that with which they adjusted to the opening of Japan and other events in the past. This adjustment would be to a very much reduced range of activities, and Japan would necessarily remain a minor power for some time to come. If, on the other hand, the announcement of the details of the Allied program for Japan is delayed, Japanese adaptation to this program must likewise be delayed, just as Germany's adaptation will, according to Dr. Hoover's statement, be retarded by the delay in the enunciation by the Allies of the details of their policy toward Germany. Thus in the Far East we find the essentially negative problem of Japan, especially the more negative aspects of this problem, proceeding much more rapidly toward a solution than the positive problem of China. The danger is no longer that there be a strong Japan and a weak China, but a situation in which both Japan and China are weak.

Inflation is a specific problem where the contrast between China and Japan is interesting to economists. China has gone through inflation so far that Dr. Tamagna finds her currency already discredited beyond reclaim. The point has been reached where, contrary to Gresham's Law, a strong currency (the United States dollar) has driven out the weak Chinese currency in certain port areas. Far from bringing the end of currency troubles, this situation promises prolonged difficulties for the Chinese in establishing a sound native monetary unit. The discrediting of the Chinese national yuan has resulted from many factors during China's long war against Japan, but two factors stand out in this picture: supply shortages and the lack of administrative tools. The severe shortages of practically everything in China exerted on prices strong upward pressures which the Chinese could not check by the mobilization of production or the type of rationing, price control, and savings programs familiar to Americans and others during World War II. The Chinese Government was not in a position to carry out tax or borrowing programs of the sort which have served so effectively in economies with highly developed industrial, commercial, and financial institutions. Americans must think back to the Revolutionary War to find in our own history a situation at all comparable to China's during recent years. That comparison—weak though it may be on such points as placing the extensive cultivation of American colonial agriculture against the highly intensive cultivation of recent Chinese agriculture, and on the degree of inflation experienced—does assist the mind in picturing China's difficulties. The inflation in Japan, on the other hand, has not yet reached such a stage as to put the yen in danger of complete obliteration. If this is to happen, it will be as a result of events in the future, but there appears no reason to challenge Dr. Tamagna's conclusion that the yen can be stabilized, under certain circumstances, much as certain European currencies have recently been stabilized. The Japanese have had the developed economy and institutions with which to attack inflation. Enough still remains of these, despite fire, destruction, defeat, and considerable demoralization, to leave adjustments along the European pattern still possible, and, in fact, probable.

Dr. Tamagna's reference to the present exchange rate of 15 yen to the dollar as an overvaluation of the yen suggests a number of comments, but I shall limit myself to two. First, the present rate is an overvaluation of the yen only if the rate of December 6, 1941, is assumed to be an equilibrium rate, or if that rate did not substantially undervalue the yen. The difficulties of determining whether an exchange rate fixed and supported by strong exchange controls gives proper values to the currencies involved are so great and so well known to economists as to require here no more than a general *caveat* that such terms as undervaluation or overvaluation must be used with considerable care. Secondly, the effects of the present yen rate seem to be those mentioned by Dr. Tamagna, and I do not dispute the conclusion that this rate treats the Japanese much better than certain rates used in Europe, especially Italy, treated the peoples there. In this sense there is surely a comparative overvaluation of the yen. That Dr.

Tamagna is strongly in favor of such an overvaluation is made very clear in an article he published last year on the problem of setting exchange rates in times of war, occupation, and transition to peace.[1]

DONALD F. HEATHERINGTON: An excellent although seldom cited illustration of British firmness and confidence in the face of exceptional difficulty and material hardship is found in the extensive amount of space, time, and energy devoted to the presentation of detailed plans for the future during the darkest periods of the war. Industrial and labor groups, private research organizations, political parties, governmental bodies, and individuals were all represented. The common tenor of these plans gave a broad hint of the direction in which the United Kingdom would move in the years ahead. In many respects the unofficial plans were more influential than the official statements, since they not only broke new ground but also mobilized and expressed in clear terms the opinions of the less articulate. Probably the outstanding example was the Beveridge Report on Social Security, prepared at the request, but not as a commitment, of the government. This report received popular acclaim, not because it established new principles or a fresh approach, but because the majority of conclusions reached coincided with the aims and desires of the public.

Careful study of these plans and the reaction to them reveals the growing body of sentiment favorable to the continuation of governmental activity in the economic sphere. Paradoxically, there was, and continues to be, substantial opposition to controls. It is clear, however, that in accepting the view that the government must assume responsibility for comprehensive planning of the economic activities of the nation if agreed objectives are to be achieved, the British public has also expressed willingness to support the continuation of whatever controls are deemed essential to the main purpose. The final test of their necessity will be the results. Although the victory of the Labor Party has at least temporarily undermined numerous assumptions on which many plans were based, there is no reason to believe that the pervading political or economic philosophies have been abandoned. This circumstance definitely insures that the policies and actions of the Labor Government will be subjected almost constantly to critical evaluation and analysis.

Dr. Murphy has performed a distinct service by her clear, factual presentation of the policies and program advocated, as well as the problems to be met by the Labor Government. Unfortunately, far too much attention has been paid to a detailed enumeration of official pronouncements on virtually every subject, while various basic economic factors almost escape mention, although they may in the over-all be equally, if not more, influential in determining the future economic position of the United Kingdom. For example, only indirect reference is made to the trend of the population —certainly one of the most important conditioning factors in British eco-

[1] F. M. Tamagna, "The Fixing of Exchange Rates," *Journal of Political Economy*, Mar., 1945, pp. 57–72.

nomic life and of sufficient current significance to warrant investigation by a Royal Commission. Similarly, the question of regionalism and the trend of industrial distribution is passed over lightly. Yet at one point Dr. Murphy submits the conclusion—with which I am in complete accord—that "Britain's immediate position will not be affected so much by the Labor Party's socialist theories as by the hard logic of her economic problem."

Dr. Murphy has sought to emphasize trends, and rightly so. Nevertheless, conflicts and the grounds for eventual conflict are deserving of greater consideration in view of the topic. I suggest that there are in reality two series of trends or imagined trends running counter to each other, that the real test is whether the second series can triumph over the first. The Labor Party came to victory primarily because a majority of the electorate had greater confidence in its ability to secure this specific result.

The first series actually consists for the most part of prewar trends, including a growing dependence on imports, greater industrial rigidity, immobility of labor, depletion of resources, inadequate or inefficient production in many industries, and those forces which contributed to the appearance of depressed areas. The reasons for the existence of these trends were recognized and labeled before the war, but the successive economic disturbances of the thirties were followed so closely by war that little could be done to remedy the situation or turn the tide. Experience with these trends did, however, set in motion the second series, outwardly manifested in the rising demand for security, larger and more stable purchasing power, and better living conditions. In a strict sense these were social aspirations and trends, but their satisfaction required economic solutions and reversal of the first series. To accomplish this in 1938 would have been difficult, but in 1946 the task is still greater, since the combined effects of destruction and dislocation consequent on the war must also be met.

This fact leads directly to the first major conflict inherent in the present situation: that engendered by the need to formulate a balanced program in which elements of reform and reconstruction will be apportioned satisfactorily. The temper of the British people is such that preoccupation with reform which does not produce results will not long be tolerated. In broad outline the mandate of the Labor Government may be clear, but in detail it is something less than "indisputable." There is, for example, the Laski in contrast to, say, the Attlee interpretation of the mandate. Back-benchers have already shown signs of restlessness, conceiving the mandate as far broader than do the Ministers.

A second but closely related conflict stems from the industrial uncertainty with respect to future action by the government. Industries susceptible to nationalization have debated whether substantial amounts of new capital should be invested in the interest of expanded production at this time. Having noted the conflict, the government has moved to resolve it by offering assurances that progressive undertakings will not be prejudiced if they continue to develop in the interim period during which official plans are being completed. In addition, some incentive has been offered by state-

ments that in the event of nationalization, compensation would take into account any new capital outlay and by other statements which imply that inefficiency in any industry will constitute grounds for investigation and possible nationalization.

One other conflict must be mentioned; viz., the potential effects of partial nationalization on nonnationalized enterprise. This should be a fruitful field for further investigation, but time permits only suggestion here. The capital needs of British industry are acknowledged to be tremendous. If capital is poured into the coal mines in an effort to increase their efficiency, either cost of capital to other industries will be increased or they will be deprived of needed amounts. Likewise, pressure to maintain uneconomical pits in operation may force subsidization of high cost areas with consequent effects on other industries. Finally, there is the question of possible displacement by alternative sources of supply.

These three obviously do not exhaust the list of conflicts, nor are they necessarily the most important. There is, for example, the equally important question of how the nation may best participate in international economic activity while insulating the domestic economy against depressive influences arising elsewhere.

One trend which should be of particular interest to economists has not yet been enumerated. Wartime experience, coupled with the need for more information if purposive direction or governmental planning is to be made effective, indicates that there will be broader and more detailed compilation and distribution of statistical material relating to economic activity in the United Kingdom. Anyone who has ever worked with British statistics will welcome this development.

I have reserved one specific comment until this time since it is less fundamental and more personal. Dr. Murphy has said in effect that any attempt to estimate the total deterioration in the British balance of payments within the next few years is "unscientific as it will depend on the state of world economic activity." "Uncertain" would be the better word. Otherwise, both Mr. Metzler and I must stand charged as being "unscientific." If the Labor Government is as fearful of forecasting or projecting as Dr. Murphy apparently is, I doubt whether it will be successful in planning the direction or controlling the climate of the British economy.

INTERNATIONAL INVESTMENT

FOREIGN INVESTMENT AND AMERICAN EMPLOYMENT

By RANDALL HINSHAW
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One of the more tempting approaches to the problem of unemployment is via the balance of payments, since in principle the problem can always be solved on the domestic level by the attainment of a sufficiently large export surplus. Such a surplus can be achieved or augmented either by a reduction of imports (including services) or by an expansion of exports. In the first case, the unemployment is simply shifted to other countries, and this may also be true in the second case if the increase in exports is obtained by methods (e.g., subsidies) which displace foreign labor. But exports can also be expanded by foreign investments or gifts, in which case foreign employment is not likely to be adversely affected. Since foreign investment does not belong in the category of beggar-my-neighbor therapy, it can be argued that such investment is amply justified, quite apart from humanitarian or income considerations, if it contributes to high domestic employment. Whether this view, as applied to the United States, reflects a rational or merely a confused approach to the employment problem will be our chief concern in the ensuing discussion.

I

This paper is written on the assumption that, after the reconversion period, our major economic problem will be the attainment of a level of aggregate demand reasonably commensurate with our technical capacity to produce. If, after reconversion, there is no hiatus between aggregate demand and potential supply, or if demand, at the prevailing price structure, actually tends to be in excess of supply, the remarks which follow will be of little relevance to future problems.

It will not be our purpose in this paper to estimate American capacity to produce at optimum employment or to guess how much less than such capacity aggregate demand is likely to be. In recent months, this problem has been tackled by several competent investigators, and the rather substantial disparity in their conclusions is simply a reflection of the numerous imponderables involved.[1] Suffice it to say that, under certain plausible assumptions (and in the absence of compensatory government spending), the estimated post-transitional level of demand is well below the level required to maintain full employment.[2]

[1] See bibliography by Everett E. Hagen in "Postwar Output in the United States at Full Employment," *Review of Economic Statistics*, May, 1945.

[2] See especially Jacob L. Mosak, "Forecasting Postwar Demand," *Econometrica*, Jan., 1945.

In principle, any deficiency of monetary demand can be eliminated by a sufficient expansion of government expenditures. In the present paper, we shall consider the possibility of removing such a deficiency through an extensive program of foreign investment. Foreign investment, from the standpoint of the American employment problem, is simply a method of placing dollars in the hands of persons (i.e., foreign persons) who can be depended upon promptly to spend the dollars on American output or to sell them to those who will.[3]

A net foreign contribution to the aggregate demand for a country's output may be said to exist when there is an excess of exports over imports of current output (including services). That is to say, the foreign contribution to aggregate demand takes the form of an export surplus, but it is an export surplus of a particular kind. It is not, of course, simply the commodity balance with which we are here concerned, nor is it the balance on current account, as commonly conceived. Rather, it is the balance of expenditures on current output of goods and services. It does not include the interest balance, since dollars which foreign persons require to pay interest cannot be used by them to purchase American output. Neither does it include the remittance (gift) balance. The latter balance, along with the capital balance, if unfavorable, should be thought of as making possible a favorable balance of current output.

II

It is sometimes assumed that the heavily favorable merchandise balance of trade during the twenties (1) contributed substantially to the total demand for American output and (2) was largely the result of the high level of foreign investment prevailing throughout the period. A careful examination of available balance-of-payments data, however, lends little support to either proposition. The merchandise export surplus was indeed large, averaging 769 million dollars a year for the period 1924–30, but it was offset to a considerable extent by an unfavorable balance with respect to current services.[4] Of the service items directly related to current employment, foreign shipping and foreign travel are much the most important, accounting for virtually the total. During the period under consideration, American expenditures for foreign shipping and travel exceeded corresponding receipts from foreigners

[3] Throughout this discussion, we shall make the favorable assumption that the dollars supplied foreigners are spent on American output as soon as they are available. This assumption is probably warranted during the early postwar period, when foreign purchases of American goods presumably will be limited only by ability to pay, but the assumption may not be so appropriate for the more distant future. (For alternative assumptions, see J. J. Polak, "Balance-of-Payments Problems of Countries Reconstructing with the Help of Foreign Loans," *Quarterly Journal of Economics*, Feb., 1943.)

[4] Unless otherwise indicated, the figures in this paper are taken from the excellent study by Hal B. Lary and associates, *The United States in the World Economy* (U. S. Department of Commerce, 1943).

TABLE I

SELECTED AMERICAN BALANCE-OF-PAYMENTS DATA, 1924–30
(Millions of Dollars)

Year	Merchandise Balance	Shipping and Travel Balance	Net Export Surplus[a]	Remittance Balance[b]
1924	+981	−272	+709	−339
1925	+683	−337	+346	−373
1926	+378	−307	+ 71	−361
1927	+680	−343	+337	−355
1928	+1,037	−415	+622	−346
1929	+842	−463	+379	−343
1930	+782	−486	+296	−306
Average	+769	−375	+394	−346

[a] Merchandise balance plus shipping and travel balance.
[b] Includes personal remittances plus institutional contributions.

by an average of 375 million dollars annually. Thus the annual export surplus of current output (including the major services) was only 394 million dollars, or a little over half the merchandise export surplus.

But this is only part of the story. It might be supposed that the net export surplus of 394 million dollars was made possible by the large outflow of new long-term capital which occurred during the twenties. There is scant evidence, however, to support such a conclusion. During

TABLE II

UNITED STATES PRIVATE LONG-TERM FOREIGN INVESTMENT AND INCOME THEREFROM, 1924–30
(Millions of Dollars)

Year	New Foreign Loans	New Net Direct Foreign Investment	Total of New Foreign Investment	Amortization Receipts	Net Sales by U.S. of Outstanding Foreign Securities	Net New Long-term Capital Outflow[c]	Income Receipts from Long-term Foreign Investments[d]
1924	823	182	1,005	120	205[a]	680	559
1925	824	268	1,092	221	321[a]	550	708
1926	921	351	1,272	296	155	821	734
1927	1,114	351	1,465	285	193	987	753
1928	1,019	558	1,577	361	−94[b]	1,310	848
1929	415	602	1,017	276	105	636	876
1930	775	294	1,069	300	405	364	802
Average	842	372	1,214	266	184	764	754

[a] Includes net change in ownership of outstanding domestic securities.
[b] Net purchase.
[c] Total foreign investment minus amortization receipts and net sales of outstanding foreign securities.
[d] U. S. Department of Commerce.

the period under consideration, new private foreign loans plus new net direct investments abroad averaged 1,214 million dollars a year. The *net* outflow of new long-term investments, however, was much smaller, because of (1) amortization receipts from abroad which averaged 266 million dollars annually during this period, and (2) net sales by the United States of outstanding foreign securities, which averaged 184 million dollars. Net new long-term investment abroad thus amounted to an average of 764 million dollars a year. But this net outward movement of new capital was almost entirely offset by the steadily mounting backflow of income from the investments. During this period, American receipts of dividends and interest from long-term foreign investments averaged 754 million dollars a year—only 10 million dollars less than the average net outflow of new long-term capital.[5] Since the net sum of dollars annually invested abroad averaged about the same as the sum of dollars required by foreigners to make interest and dividend payments on the accumulated investments, it is clearly misleading to assert that the net export surplus during the twenties was sustained by the high level of foreign investment.

As a matter of fact, the net export surplus of current output was largely made possible by the unfavorable remittance balance; i.e., by gifts. Remittances to foreign persons and institutions exceeded corresponding receipts during this period by an average of 346 million dollars a year. This was only 48 million dollars a year less than the average annual net export surplus for the period.

III

Foreign giving involves no problem of interest or repayment, and can be continued indefinitely without necessitating any change in the philanthropic country's balance of payments.[6] Thus the maintenance of a large export surplus by a high level of foreign giving is one method of creating domestic employment without leading to obvious economic dilemmas. This method would seem to have no economic advantages not shared by domestic consumer subsidization, and from a domestic point of view has the disadvantage of conferring upon other countries the wealth created by the increased employment at home. From a world perspective, however, such unselfishness, if on a conscious level, would hardly be open to criticism, and the result in any case would be preferable to a low level of world income and employment.

[5] Of course not all these receipts were attributable to foreign investments made during the twenties, but to a surprising extent this was the case. For example, American interest receipts from private long-term foreign loans amounted to only $87 million in 1919. By 1930, the figure had steadily climbed to $429 millions. (Figures supplied by U.S. Department of Commerce.)

[6] The giving need not be intentional. Defaulted foreign loans, for example, are in fact gifts. Another form of concealed giving is the exchange of goods for an asset (e.g., gold) of dubious utility except as an employment-creating device (the *income* created by the employment being largely given away).

Let us consider a hypothetical case. Suppose that, after reconversion, the United States at optimum employment can produce a gross national product of 200 billion dollars a year, but that at this level of income, aggregate demand (expenditures of consumers, business, and government) would amount to only 180 billion dollars. In this situation, full employment could be maintained indefinitely (assuming no change in productivity or labor force) if 20 billion dollars of otherwise idle funds were annually given to foreigners. Income domestically consumed might not be much greater than if the gift were not made, but the distribution of income would be different because of the absence of unemployment.[7]

This is the policy of "permanent lend-lease," sometimes more or less facetiously advocated as a method of solving the employment problem. Whatever may be said for or against such a program, it is hardly in the realm of political possibility. Giving on any such scale would have to be public giving, and to be fully effective would have to be accomplished through public borrowing. When this became apparent, it would surely also be realized that full employment could just as easily be maintained by domestic public spending, with the added advantage that the increase in income would be consumed at home.

IV

Large sums are likely to be placed in the hands of foreigners only in the expectation of a return. This alters the picture substantially so far as the employment problem is concerned. If a given amount of dollars is annually invested abroad at a fixed return, eventually the annual sum due from foreign countries in interest will equal, then exceed, the annual sum invested. That is to say, the net foreign contribution to aggregate demand will gradually disappear if income from the investments is to be transferred.[8] The lower the rate of return, the longer the process will take, but at the rates governing most American foreign investment in the past, the net foreign demand for domestic output would disappear in scarcely more than a decade.

There is only one way of indefinitely maintaining an export surplus of current output by foreign loans, and that is by lending interest as well as principal.[9] Since interest is due from the borrower not only on the original principal sums but on the interest borrowed, the net amount which must annually be lent to maintain a given export surplus must

[7] Income domestically consumed would be somewhat greater than if the gift were not made because of the secondary effects on national income of a reduction in exports. See especially Fritz Machlup, *International Trade and the National Income Multiplier* (The Blakiston Company, 1943).

[8] The degree to which the decline in foreign demand may be offset by an increase in domestic demand (resulting from the transfer of investment income) will be considered later.

[9] It will facilitate discussion at this point if we confine our attention to foreign investment in the form of loans at a fixed return. During the twenties, over 70% of American long-term investment abroad was of this kind. Such modifications as are necessary to make the conclusions apply to direct foreign investment will be made during the course of the discussion.

increase at a compound rate. Table III shows how rapidly lending (net of amortization) must increase to sustain an export surplus of 1 billion dollars per annum.

TABLE III
ANNUAL AMOUNT OF PERPETUAL LOANS REQUIRED, AT VARIOUS INTEREST RATES, TO MAINTAIN AN ANNUAL EXPORT SURPLUS OF 1 BILLION DOLLARS
(Billions of Dollars)

Year	2%	3%	4%	5%	6%	7%	8%
5th year	1.10	1.16	1.22	1.28	1.34	1.40	1.47
10th year	1.22	1.34	1.48	1.63	1.79	1.97	2.16
15th year	1.35	1.56	1.80	2.08	2.40	2.76	3.17
20th year	1.49	1.81	2.19	2.65	3.21	3.87	4.66
25th year	1.64	2.09	2.67	3.39	4.29	5.43	6.85
30th year	1.81	2.43	3.24	4.32	5.74	7.61	10.06
35th year	2.00	2.81	3.95	5.52	7.69	10.68	14.79
40th year	2.21	3.26	4.80	7.04	10.29	14.97	21.72
45th year	2.44	3.78	5.84	8.99	13.76	21.00	31.92
50th year	2.69	4.38	7.11	11.47	18.42	29.46	46.90

Thus if it is desired to maintain, through foreign lending, an export surplus of 1 billion dollars a year, and if the funds are lent at an interest rate of 5 per cent, in less than fifteen years it is necessary to lend, net of amortization, 2 billion dollars a year if interest on all obligations is to be transferred. At an interest rate of 7 per cent (a rate at which many loans were made during the twenties), it is necessary after only twenty-one years, to lend over 4 billion dollars a year to support an annual export surplus of 1 billion dollars. At low rates of interest, the process is of course much slower. Thus if the loans are made at 2 per cent, it is not until the thirty-fifth year that it is necessary to lend as much as twice the amount of the desired export surplus.[10]

The figures in Table III show only the net amounts which must be lent per annum to maintain a given export surplus, and thus present the problem in the most favorable light. Except in the case of perpetual loans, however, the net figure does not reveal the volume of securities which must annually be sold to Americans to maintain the export surplus. Ordinarily the gross amount of required lending is much greater than the net amount, since foreign loans are almost invariably made for a limited term of years. For example, if the loans mature in twenty years, the annual volume of securities which must be sold, at various rates of interest, to maintain an export surplus of 1 billion dollars is as shown in Table IV.

[10] The figures in Table III can also be applied to direct investments. Since the return on direct investments is commonly higher than on loans, a larger volume of such investment is required to maintain a given export surplus if profits are to be transferred. If profits are not transferred but are reinvested abroad, a given export surplus can be maintained by a constant amount of direct investment per annum.

TABLE IV

ANNUAL AMOUNT OF 20-YEAR LOANS REQUIRED, AT VARIOUS INTEREST RATES, TO MAINTAIN AN ANNUAL EXPORT SURPLUS OF 1 BILLION DOLLARS[a]

(Billions of Dollars)

Year	2%	3%	4%	5%	6%
5th year	1.35	1.38	1.43	1.47	1.52
10th year	1.81	1.92	2.03	2.16	2.31
15th year	2.44	2.65	2.90	3.18	3.50
20th year	3.28	3.67	4.14	4.68	5.32
25th year	4.41	5.08	5.90	6.88	8.09

[a] It is assumed in this table that the sum of interest plus amortization on each loan is paid in equal installments.

It is evident that amortization on a twenty-year basis affects the picture very much indeed. Even at the low interest rate of 2 per cent, it is necessary, after only twelve years, to sell over 2 billion dollars of securities a year to maintain an annual export surplus of 1 billion dollars; at the end of twenty-five years, it is necessary to sell over 4 billion dollars of securities a year.

V

While in principle it is possible to maintain an export surplus indefinitely by an expanding outflow of capital, it is clear that under realistic assumptions with respect to interest and amortization, such an outcome is decidedly unlikely. Let us therefore examine more carefully the situation in which no attempt is made to preserve the export surplus achieved by foreign loans. It will be helpful at this point to refer again to a previous illustration, in which demand for American output was assumed to be 20 billion dollars a year less than capacity to produce at optimum employment. We shall make the somewhat heroic assumption that, in order to maintain full employment, 20 billion dollars (net of amortization) are annually lent abroad at 5 per cent interest.[11] We shall also assume that at full employment, American imports of goods and services amount to 10 billion dollars a year. In this situation, 30 billion dollars are annually supplied to foreign countries, and of these dollars, all are available for the purchase of American output except those which are due as interest. The interest bill, however, increases at the uniform rate of 1 billion dollars a year. On the assumption that all foreign dollars not due as interest are spent on American output, this means that American exports must fall by 1 billion dollars a year if interest is to

[11] Such a level of foreign investment is of course much higher than any now regarded as within the realm of possibility. At its peak in 1928, new American private long-term foreign investment (gross lending plus net direct investment) amounted to only 1.6 billion dollars. But we are here interested, not in what level of foreign investment will actually be attained, but in whether a very high level of foreign investment would correct a chronic and substantial deficiency of aggregate demand.

be transferred. At the end of twenty years, foreign purchases of American output will have ceased to make any net contribution to American employment (being exactly offset at that point by American imports), and at the end of thirty years *all* dollars accruing to foreign countries will be owed to Americans as interest. Interest can be transferred at that point only if American exports are zero. Beyond thirty years, the flow of dollars to foreign countries would be inadequate even to take care of the interest sums due.

An increase in American imports would of course facilitate the transfer of interest, though it would in no way assist in the solution of the employment problem. Rather the reverse.[12] But is there any reason in this situation to assume an increase in imports? In the absence of a reduction in import restrictions, an increase in imports would be expected only as a result of (1) an increase in national income or (2) a reduction in import prices. Under present assumptions, an increase in national income is ruled out; at the moment, we are concerned with the problem of maintaining (i.e., preventing a fall in) a given level of income. (We must be careful to avoid assuming away our problem by assuming a rise in income unless we can trace the process whereby a rise in aggregate demand can take place.)[13] A secular fall in the price level of American imports would be expected as a result of the foreign capital improvements issuing from the American investment abroad, but it is not certain that this would lead to a substantial increase in American imports. In fact, there is some evidence that, at the present level of tariff protection, the price elasticity of the American demand for imports is less than unity.[14] If this is actually the case, a reduction in the import price level would aggravate the transfer problem, since it would result in a fall rather than a rise in the value of American imports.

VI

The complete story concerning the backflow of interest must of course include an examination of the manner in which the interest income is disposed of by the recipients. Here we are confronted with

[12] At least this is true in the short run. The longer-range repercussions on employment of an increase in imports are exceedingly complex, and are not examined in this paper.

[13] For the sake of simplicity, we have assumed in this illustration that the level of productivity and the size of the labor force are fixed. That is to say, we have assumed that American capacity to produce at full employment does not change. The implications of this assumption, however, must be carefully borne in mind. If productivity increases, with everything else unchanged, full employment cannot be preserved merely by maintaining a fixed level of aggregate demand; either demand must increase in proportion to the increase in productivity or working hours must be reduced. During the past few decades, the productivity of American labor has increased at an average rate in the neighborhood of 2½% a year.

[14] See J. H. Adler, "United States Import Demand during the Interwar Period," *American Economic Review*, June, 1945, and Randall Hinshaw, "American Prosperity and the British Balance-of-Payments Problem," *Review of Economic Statistics*, Feb., 1945.

various possibilities. As a first case, let us suppose that the foreign loans are made by the United States Government, so that all interest receipts accrue to the United States Treasury. If, in spite of the receipt of interest from abroad, the government neither increases expenditures nor lowers taxes, the effect of the backflow of interest will clearly be deflationary. In the situation cited, exports would fall by 1 billion dollars a year, and the fall in income and employment originating in the export industries would be unaccompanied by a rise anywhere else. To avoid deflation, it would be necessary for the government to offset the fall in exports either by increasing its expenditures on goods and services by 1 billion dollars each year or by lowering taxes to the degree required to increase private expenditures on current output by 1 billion dollars each year.

If the lending were private, and if the American bondholders spent the interest received from abroad on the same output that would have been exported had the interest payments not been made, it is clear that the transfer of interest would be without deflationary consequences. Employment not only would remain at the original level, but would remain of exactly the same character. Exports would continue to fall, but the volume of sales (and thus employment) in the export industries would be unaffected, since the decline in sales abroad would be exactly offset by the increase in sales at home. In this situation, national income would remain unchanged, and the fraction of national income domestically consumed would steadily increase.[15]

Under these conditions, there would clearly be nothing to fear from the transfer of interest.[16] The foreign contribution to American employment would gradually disappear, but it would be replaced by an equivalent domestic contribution to employment. At the same time, the foreign contribution to American *income* (in the form of interest payments, made possible by a gradual fall in American exports) would steadily increase, with the happy result that full employment in the United States would be accompanied by a gradual increase in real income per capita.

Unfortunately, this prospect is not the most probable outcome of the situation we have assumed. There is more than a presumption that dollars in the hands of American interest recipients would be spent on American output at a lower time-rate than would dollars in the hands of foreigners. If this is in fact the actual state of affairs, it is clear that

[15] To maintain a given level of national income in this situation, it is not, of course, necessary that the interest income from abroad be spent on the same output that would otherwise have been exported. It is sufficient merely that the income be spent on domestic output at the same rate that it is received.

[16] That is to say, there would be nothing to fear until the annual outflow of dollars was inadequate to take care of the annual sums due as interest. Under present assumptions, this point would be reached in thirty years.

the effect on the American economy of receiving a steadily mounting flow of interest from abroad would be progressively deflationary.

VII

It would seem apparent that while a large annual volume of foreign investment may be an effective means of achieving full employment, it is hardly a feasible method of maintaining this objective. As we have seen, to maintain a given export surplus by means of loans requires, even under conservative terms of interest and amortization, a rapidly rising level of gross lending; otherwise, the foreign contribution to domestic employment soon disappears. The conclusion is substantially the same where the export surplus is achieved by direct foreign investment.[17] In fact, to the degree that direct investments are characterized by high rates of return, they are clearly less effective in promoting domestic employment than foreign loans of the type now generally contemplated. If *employment* is the primary objective in encouraging foreign investment, then it is clear that loans at very low rates of interest and with very long maturities will serve the purpose best.

From the standpoint of employment, however, the pattern of American foreign lending during the next few years will almost certainly be of a perverse character. Such lending is likely to be conducted on a very large scale during a period when unemployment is not the primary economic problem. By the time reconversion has been completed and pent-up demand largely satiated, the backflow of interest and amortization may be so great as to wipe out any export surplus of current output. That is to say, foreign lending will in all likelihood be heavy at a time when it is not needed to maintain high employment, and is likely to be largely or completely ineffective for this purpose by the time the problem of underemployment tends to reappear. Foreign lending, in fact, is likely to decline substantially at just this point, and may be well below the level of interest and amortization receipts.

This of course does not mean that an extensive program of American foreign investment is inadvisable. Currently, a strong case is being made for such a program as a means of world reconstruction and development, and the arguments will inevitably interest those whose concern for human welfare extends beyond national borders.[18] In any event, the traditional case for international investment has never been

[17] Except, of course, where the profits are not transferred.

[18] For a temperate and well-balanced discussion of the broader aspects of a rational foreign-investment program, see Walter R. Gardner, "The Future International Position of the United States as Affected by the Fund and Bank," *American Economic Review*, Papers and Proceedings of the Fifty-seventh Annual Meeting, May, 1945. The subject is also thoughtfully discussed by Norman S. Buchanan in *International Investment and Domestic Welfare* (Henry Holt and Company, 1945) and by Howard S. Ellis in *Postwar Economic Problems* (edited by Seymour E. Harris) (McGraw-Hill Book Co., Inc., 1943).

stated in terms of employment but in terms of income. The economic justification for foreign investment is fundamentally the same as for domestic investment; both are methods of increasing the real income which can be obtained from a given expenditure of human effort. Under rational conditions, the increase in real income issuing from international investment accrues not only to the country in which the investment is made but to the country which makes the investment. But the only way in which real income can be transferred is by a process which reduces the foreign contribution to employment. Since this is so, and since in principle the employment problem can always be solved on the domestic level, it would seem the better part of wisdom not to seek a solution via the foreign balance. Such solutions are simply methods of creating employment by making it necessary to do more work to achieve a given standard of living.

THE DOMESTIC EFFECTS OF FOREIGN INVESTMENT

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Introduction

The position of the United States as the principal source of international capital to meet the reconstruction and development programs of foreign countries raises several questions as to the probable effects of foreign investment on the domestic economy, both in the near future and in the long run. The most pertinent questions regarding these effects are the following:

1. Would a large volume of foreign investment increase inflationary pressures to the danger point during the reconversion period?

2. Thereafter and for such time as foreign investment may continue in substantial volume, would it make a desirable and significant contribution to full employment?

3. In the longer run will the United States be able to adapt itself to a mature creditor status more successfully than in the past?

These questions cannot have real meaning unless they are considered in quantitative terms. Their significance and the answers to them must vary, depending on whether the assumed rate of foreign investment is in the order of, say, 1 billion dollars per year or five or ten times that much. Without attempting either to predict what the future volume of United States investment abroad will be or to propose what it ought to be, I shall consider the problem in relation to an assumed gross outflow of American capital aggregating 50 billion dollars over the next twenty years. This volume of investment would not proceed at an even, annual rate but would be concentrated in the early part of the period—20 billion dollars in the first five years and the remaining 30 billions spread, at a gradually declining rate, over the following fifteen years. Thereafter we may assume that investment levels off to a regular annual flow of 1 billion.

This volume of investment, plus existing investments and minus future amortization under assumptions to be given later, would bring the outstanding amount of United States investments in foreign countries to a peak of about 47 billion dollars at the end of 1963. Under these assumptions, United States investments abroad would rise somewhat above the maximum aggregate amounts of claims by all creditor countries on debtor countries in the past, which totaled about 40 billions in 1914[1] and may have reached a slightly higher magnitude during the interwar period. It must be remembered, however, that world productive capacity is now very much larger than it was in 1914 or in 1929,

[1] Cf. Arthur R. Upgren, "International Capital Financing," in *Economic Reconstruction* (edited by Seymour E. Harris), p. 354.

and there is little basis to doubt that 1965 will see a further marked advance, especially if international investment capital continues to aid in the expansion of undeveloped areas.[2] Whether or not the future volume of international trade, particularly United States imports, will rise sufficiently to support service on such a level of investments is a more pertinent issue, which will be considered later in connection with the repayment problem.

The volume of future foreign investment assumed herein may well be far larger than the total which will actually be made over the next twenty years. Certainly no such volume of new investments will come into being unless the international political situation is favorable.

The assumed total is also much larger than is in sight under present authorizations for loans through national or international agencies together with some allowance for investments through private channels. The principal sources or instruments of foreign investment are: (1) lend-lease funds available for financing "pipe-line" lend-lease, (2) the Export-Import Bank, and (3) the International Bank for Reconstruction and Development. These sources add up to about 13 billion dollars, including credits already arranged in the last quarter of 1945. In addition, there is the proposed extraordinary loan of 3,750 million dollars[3] to the United Kingdom. Other loans and direct investments should bring the total to the 20 billion dollars assumed herein for the first five postwar years. Additional authorizations, however, would be necessary for continued lending in substantial volume thereafter.

For purposes of the present discussion it will be assumed that neither political conditions nor the availability of funds will be limiting factors on foreign investment up to a 50 billion dollar total over the next twenty years.

Foreign Investment and Inflation

The question which concerns the next twelve months centers around the effects of foreign investment upon domestic prices. This is the period of continuing domestic shortages, particularly in consumers' and producers' durables, pending the completion of reconversion and the resumption of a full flow of production. It is also the period of most critical foreign need, by comparison with which our own shortages are trivial. The United States has a profound interest in meeting these needs as fully and quickly as possible. First of all, there are the obvious humanitarian and political aspects of foreign relief and reconstruction. Secondly, there is the very practical consideration that the sooner foreign countries recover their productive capacities, the less will be the amount of

[2] It should also be noted that current prices, although at about the same level as in 1929, are substantially higher than in 1914.

[3] Exclusive of $650 million representing the net sum due from the United Kingdom to the United States in settlement for lend-lease, reciprocal aid, surplus war property, and claims.

assistance required through future contributions or loans. Thirdly, capital assistance now is required if we hope to attain our long-run commercial policy objectives. It should have become fully apparent to all from the discussion at the Bretton Woods conference and from the negotiations on the loan to the United Kingdom that we must not expect foreign countries to relax their trade restrictions unless we are prepared to provide adequate financial backing. Finally, the United States must be willing to establish substantial lines of credit at this time to enable foreign countries to prepare their reconstruction programs and their reintegration in the world economy and to place orders for capital equipment requiring many months to produce, even though utilization of the credits may be spread over the next several years.

For the last-named reason, the aggregate amount of loans granted must substantially exceed the actual outflow of loan funds during the current year. In addition to expenditures out of loans, a number of foreign countries have considerable holdings of dollar balances and gold, part of which will doubtless be drawn upon to finance purchases of American goods. A low volume of lending would probably necessitate a somewhat higher rate of utilization of these holdings and, in many instances, the impairment of reserves for future contingencies and the strengthening of exchange restrictions abroad. The aggregate utilization of loans and of accumulated gold and dollar reserves, together with UNRRA shipments required to meet the most pressing foreign needs, will probably mean an export surplus of several billion dollars in 1946. If imports are placed at about 5 billion dollars, total exports in 1946 will probably be in the general order of magnitude of 10 billions.

The inflation problem as related to exports of this magnitude can be broken down into two parts: (1) Will the direct effects of foreign expenditures from loans tend to raise prices in areas of continuing shortages? (2) Will the indirect effects—the release of additional purchasing power to income recipients in the United States—be inflationary?

The direct effect of the foreign demand depends upon the supply situation of those commodities toward which foreign demand will principally be directed. Surpluses over domestic demand are expected in most agricultural goods, including cotton and tobacco, with the exception of fats and oils and sugar. Surplus capacities can be found for the production of unmanufactured and semimanufactured steel, aluminum and other light metals, railroad equipment, shipbuilding and marine equipment, aircraft and supporting industries, electrical machinery and instruments, machine and small tools, heavy chemicals, medicinals, and many other products for which productive capacities were expanded during the war. Labor is not expected to constitute a bottleneck in view of the cutbacks in the war industries and the demobilization of the armed forces. Commodities for which the productive capacity may

be too small to meet the domestic demand include, in addition to most durable consumers goods and building material, such items as broad-woven cotton goods, agricultural machinery, and some other special machines. The foreign demand for most durable consumers goods will probably be held down by foreign import controls. Some of the other scarce goods, particularly agricultural and textile machines and lumber, should be allocated officially or privately between domestic purchasers and foreign countries in order to meet the most urgent reconstruction needs abroad and at the same time prevent unnecessary limitations of the supplies for our own use.

As far as producers' equipment, manufactured and semimanufactured durable goods, chemicals, pharmaceuticals, synthetic rubber, and many other products required abroad are concerned, foreign demand, even if it would exceed the available surplus supply or surplus capacity, would hardly cause prices to rise but would be reflected in delayed deliveries. The most sensitive spot for inflationary impacts of foreign purchases seems to be in foods. Because of unusually poor harvests in Europe, North Africa, Australia, and Argentina, foodstuffs production in these countries during 1945 was less than the year before. The deficit countries have to rely, therefore, to a much greater extent than last year upon imports from the United States and Canada. It is quite conceivable that foreign demand, including purchases by UNRRA and provisions for the occupied enemy countries, will closely approach or even exceed surpluses of many foodstuffs, including grains, meat, dairy products, dried legumes, fats and oils, and sugar; although in general the pressure of demand for food on available supplies will be less than it was during the war, when military requirements were high.

Price rises of foodstuffs would immediately lead to further demands for higher wages and would thus spread throughout the economy. To meet such inflationary pressures, it may be necessary to continue allocations through the Combined Food Board and to continue effective price controls. After the summer of 1946, if better harvests are obtained in Europe, some of these controls could be relaxed. It seems to be neither desirable nor possible to reduce inflationary pressures on food prices by curtailing foreign loans, in view of our contributions to UNRRA and the dollar funds and gold reserves held by foreign countries. In all probability, the curtailment of loans would only reduce the demand for those goods for which we have excess capacities or which we already have in surplus supply.

The indirect effects of a substantial volume of foreign investments combined with financial aid to UNRRA and liquidation of some of the accumulated foreign dollar funds and gold holdings are hard to appraise. If price controls are successfully maintained, the additional income would probably not significantly increase the demand for foodstuffs,

other perishable goods, or rents. A greater-than-average proportion of these incomes would be used for the purchase of semidurable or durable goods, if these goods were available. In view of the continued limitation of the supplies of such goods, however, funds that would otherwise be spent on them are likely to be saved. The multiplier effect of the incomes created in producing the export surplus during 1946 would therefore be smaller than could be expected on the basis of prewar relationships and smaller than can be anticipated for later years.

On the other hand, if, because of lack of price controls on strategic commodities such as food or because of higher costs of production, prices and wages should start to spiral, people would save less and the propensity to consume would increase sharply. In this case domestic inflationary pressures would become so great that the direct and indirect effects of an export surplus of several billion dollars would be insignificant.

One cannot conclude, therefore, that foreign loans would be inflationary in the present setting. If a potentially inflationary situation exists and if controls are absent or too weak, pressures will come from many sides, even if loans to foreign countries are not extended. On the other hand, if adequate controls are maintained, foreign loans will not add significantly to inflationary pressures during the reconversion period.

Foreign Investment after Reconversion

By the end of 1946 supply shortages will presumably have been overcome in most lines important in United States exports, and thereafter we need be concerned only with the general effects of foreign investment on the domestic economy. For this purpose I shall have in mind a gross outflow of American capital in the order of 4 billion dollars annually from 1947 to 1950. The net flow of capital, after deducting amortization but not interest, would be only slightly less during this early postwar period.

Such a volume of capital outflow would be small in relation to a gross national product approaching 200 billion dollars. Likewise the amount of employment directly provided by the increased exports made possible by foreign investment would be small in relation to the total labor force of some 60 million persons. Nevertheless, because of its multiplier and other effects, foreign investment may be of considerable marginal importance. It is generally estimated that the annual volume of savings associated with a gross national product of 200 billion dollars would be in the order of 30 billions. Under the present assumptions foreign investment would absorb about 12 per cent of these savings. The importance of this fraction to domestic economic conditions will depend upon the size of other offsets to savings. This question is exceedingly difficult

to deal with and would tend to go beyond the scope of the present paper. As far as it is posssible to deal with the question quantitatively, however, the weight of current opinion clearly appears to be that investment activity in general will need to be encouraged and inducements to invest strengthened if a high employment economy is to prevail. Opinions differ as to the probable dimensions of the problem and as to the effects of alternative approaches to a solution, but there seems to be no disagreement concerning the need to stimulate investment once the inflationary pressures of the immediate reconversion period are past.

It is largely for this reason that we find all of the essays dealing with problems of international finance in the recent symposium, ***Financing American Prosperity***, favorably disposed, with varying emphasis, toward foreign investment. For instance, Sumner Slichter, although more optimistic than some of his fellow contributors concerning the future savings-investment relationship, makes allowance for an export surplus of 3 billion dollars or more in estimating the total demand for goods at high employment levels.[4] Howard Ellis offers no estimates but makes a more positive statement of the case for foreign investment:

> Aside from cyclical depressions, the secular development of the foreign trade of the United States may well spell the difference between success and failure for our domestic policies. We shall in the next few years be working out new functions and a realignment of functions for government and private enterprise; during this process, the successful disposition of our flow of savings would be facilitated by really substantial foreign investments.[5]

While we can be reasonably certain of the general desirability of the stimulus to the American economy that would be afforded by foreign investment during the several years following reconversion, we cannot predict the magnitudes that would be most consistent with domestic conditions. Certainly we cannot rely upon foreign investment as the principal means of underwriting prosperity if serious shortages should develop in home demand, unless we are prepared to proceed without regard to the prospects for eventual adaptation to changing creditor-debtor relationships. Even though foreign investment remains a marginal factor in the total picture, however, it would appear desirable, from a purely domestic point of view, if the outflow of capital could be so timed as to exercise a contra-cyclical influence. This would call for a concentration of foreign investment activity in times when domestic business activity is low and for a corresponding reduction in times when domestic demand is high. Undoubtedly some possibilities of influencing the flow of capital in this way exist and should be exploited, but they will be limited, especially during the next several years, by the urgency of foreign reconstruction and development programs and by the inherent difficulty of controlling the timing of direct investments.

[4] Sumner H. Slichter, "Public Policies and Postwar Employment," in ***Financing American Prosperity*** (edited by Paul T. Homan and Fritz Machlup), p. 286.

[5] Howard S. Ellis, "Economic Expansion through Competitive Markets," *op. cit.*, p. 156.

Adjustment to Mature Creditor Position

Probably the most disturbing problem connected with the investment of American capital abroad is that of the ultimate adjustment to the position of a mature creditor nation with receipts of income and principal in excess of new investment and with the balance on trade and service transactions adjusted to accommodate the change in investment items. The adjustment question connected with the volume of investment assumed in this analysis may be broken down into three parts: (1) How large will the adjustment be? (2) What are the prospects that the necessary changes in trade and service transactions can be made? (3) Will the adjustment involve deflationary influences offsetting the expansionary advantages gained in the active investment period?

To answer the first question it is necessary to make more specific assumptions as to the interest and repayment terms associated with 50 billion dollars of gross capital outflow over the next twenty years. It has already been postulated that 20 billion dollars of the investment will be made in the next five years, and that the remaining 30 billions will be spread over the following fifteen years, declining gradually from an annual rate of 3 billions in 1951 to 1 billion in 1965. Thereafter the 1 billion annual rate would be maintained, although exceeded by amortization receipts from previous investments. The following additional assumptions will be made:

1. One-fifth of the total, or 10 billion dollars, will take the form of direct investments, spread evenly over the twenty-year period in annual amounts of 500 millions, and yielding income at the rate of 6 per cent per year. Whether or not opportunities will exist for this amount of venture capital will depend on the institutional environment in foreign countries, but the results of the computation would not be changed significantly if a smaller proportion were asumed for direct investment.

2. All of the remainder, or 40 billion dollars, will be in the form of thirty-year loans bearing interest at 4 per cent, interest only being payable in the first five years of each loan, and thereafter interest and amortization combined being scheduled in equal annual installments sufficient to retire each issue in the remaining twenty-five years of its life. These terms are probably not unrealistic, whatever may be the aggregate volume of lending. The assumed rate of interest is higher than that charged by the Export-Import Bank on reconstruction loans to European countries (ranging from $2\frac{1}{2}$ to $3\frac{1}{2}$ per cent, depending on serial maturity dates),[6] substantially higher than that provided in the proposed loan to the United Kingdom, lower than may be generally expected on private long-term loans, and probably close to the rate that

[6] A rate of $2\frac{3}{8}\%$ is being charged by the Export-Import Bank on loans to finance the purchase of goods that had been requisitioned through the lend-lease mechanism but not contracted for prior to V-J Day.

will be charged to borrowers on loans by or through the International Bank for Reconstruction and Development.

These assumptions are all that we need to compute the balance-of-payments adjustments required on new investments to the assumed total of 50 billion dollars in the next twenty years. But in order to study the behavior of all interest and dividend and capital items, let us also make allowance for service on existing United States investments abroad of an income-producing nature. These now amount to some 9,400 million dollars[7] of which slightly less than 7 billions is in the form of direct investments and the remainder consists of portfolio securities, chiefly the residue of foreign dollar bonds floated in the twenties. For the sake of simplicity, it will be assumed that amortization on these portfolio securities will be at the annual rate of 160 million dollars until they are paid off, and that interest will average 5 per cent on the portion outstanding in any year. It is further assumed that direct investments will remain intact and will yield income at the rate of 6 per cent per annum.

On the basis of these assumptions, United States investments abroad, both new and old, would reach a peak of about 47 billion dollars at the end of 1963 and would decline thereafter, at first gradually and then rapidly after 1975 as the large postwar loans were fully paid off. Gross debt service receipts, including both income and amortization, would increase gradually over the entire period, rising from about 700 million dollars in 1946 to 3,500 millions in 1965 and further increasing somewhat over the next ten years. Thereafter debt service charges would also begin to decline rapidly. The balance between new United States capital investment, on the one hand, and interest, dividends, and amortization, on the other hand, would fall rapidly from a net outflow in the order of 4,300 million dollars in 1946 to about 1,800 millions in 1950. Beginning with 1956 there would be a net inflow gradually rising to 2,400 millions by 1965 and to a peak of 3,100 millions in 1975.[8]

At this point I should like to emphasize that the magnitude of the future readjustment problem is accentuated by the model selected, under which the aggregate amount of foreign investment outstanding is reduced after 1963. This is manifestly the hardest case to meet, short of a sudden termination of all new investment activity. Actually there is no reason why the United States should expect to draw down rather than

[7] The difference between this figure and the one published in *Foreign Commerce Weekly* of January 27, 1945, in which the United States long-term investments abroad were estimated at $10,600 million, is due to the following factors: From total direct investments abroad were deducted the value of those located in Germany and Japan and a part of those in other war areas in order to allow for war damages. The other long-term investments have been valued by capitalizing present returns at 5%. In this way nonincome-producing investments are, in effect, omitted from the total. Lend-lease settlement loans are assumed to be included in the postwar investments of $20 billion during the years 1946 to 1950.

[8] The detailed computations corresponding to the stated assumptions are given in the appendix table.

increase its stock of capital invested in foreign countries any more than it expects to draw down its stock of domestic capital.

The next question is: What are the prospects that other items in the United States balance of payments will adjust smoothly to these shifts in the balance on capital and investment-service items? This question concerns primarily the behavior of United States imports of goods and services, for unless these purchases are sufficient, the burden of adjustment will have to fall on exports or take the form of reduced investment returns.

During the next several years United States import demand will not be fully satisfied because of limitations on the productive and export capacities of foreign countries. Imports in 1946 will probably be in the general order of magnitude of 5 billion dollars as compared with about 4,100 millions in 1945, most of which came from the Western Hemisphere. Thereafter, under the combined influence of expanding domestic business, reconstruction abroad, and the reopening of trade channels, imports may be expected to rise further. What they will amount to in an early normal postwar year is a moot question. But, in consideration of a rise in import prices of some 50 per cent as compared with the 1936–38 average, a great expansion in domestic business activity and hence in import demand, and a more liberal trend in United States commercial policy, a 7 billion dollar total would seem to be a reasonable expectation for, say, 1950.

After 1950 the question of adjustment by the United States to a mature creditor position will hinge chiefly on the future trend in its imports. Although the precise amount of imports in any given year is uncertain, there can scarcely be much room for doubt as to their long-run upward trend in keeping with the growth in domestic production and income. If we disregard the thirties when protracted subnormal business conditions combined with falling prices and the tariff of 1930 brought imports to exceptionally low levels, the secular trend in the quantity of United States imports up to 1929 represented an annual increase of 3.7 per cent compounded, or a doubling about every nineteen years. Even if we make the conservative assumption that the secular rate of growth in future imports will be cut to 3 per cent per annum, imports would rise by almost 4 billion dollars from 1950 to 1965 or, say, from 7 billions to about 11 billions.

Another likely source of increase in dollar payments to foreign countries is the expenditures of American travelers abroad. We may also include here the expenditures of Americans permanently residing abroad, whose numbers are likely to expand as the retirement age is lowered and as the cost of personal services in this country increases. It is extremely difficult to judge the future potentialities of outlays of this nature, but I believe that 1,500 million dollars by 1965 would be a conservative estimate. This alone would cover almost half of the gross

investment service receipts due the United States in that year under present assumptions.

Without attempting to suggest the course of other invisible items, which will probably about cancel out as between receipts and payments, it appears reasonable to believe that the shift in net capital and investment-service payments associated with the transition to a mature creditor position could be readily accommodated out of the prospective secular rise in United States imports and travel expenditures over the next twenty years. This would mean that merchandise exports, although perhaps somewhat reduced from their early postwar maximum, would not be subject to further downward pressure as a result of readjustment requirements but would probably tend to level off at about 10 billion dollars per year over the period.

The possibility should not be excluded that, instead of posing difficult problems of ultimate adjustment, future returns from investments and the import surplus associated with them may stand the United States in good stead. For a number of years foreign demand for United States exports has seemed, at least superficially, to be much stronger than United States demand for foreign goods—so much so that some writers have been led to speak of a "chronic shortage of dollars." Certainly this lack of balance will be intensified during the next few years until foreign productive capacities are restored. But the relationship may be profoundly altered during the next several decades. As our industry expands and as the population becomes increasingly concentrated in secondary and tertiary production, United States requirements of imported goods, particularly primary commodities, will become increasingly indispensable. The war has demonstrated what vast quantities of raw materials are required to feed American industry at full production and at the same time has made serious inroads on the country's natural resources. With reference to exports, the position of the United States at the moment seems to be one of unchallenged strength, but it would be foolish to assume that these advantages will remain so unique as they are today. In other words, the natural evolution of United States foreign trade may tend toward the development of an import surplus, and we may find it greatly to our advantage to be able to finance the excess out of the proceeds of investments undertaken during the time of our greatest relative strength. In this respect, the evolution of the United States during the present century may not be unlike that of the United Kingdom during the nineteenth century.

A final question which may be raised regarding the ultimate readjustment to a creditor position is whether or not the shift to an excess of receipts from investments will be a deflationary influence on the domestic economy. This question merits more detailed analysis than can be given here, but I should like to express sharp disagreement with the common and undiscriminating treatment of an export surplus as

expansionary, an import surplus as deflationary, and a balanced trade as neutral in their effects on employment. Whether a positive or negative trade balance has a positive or negative influence on employment depends entirely on the causal sequences and relationships involved. For instance, it is easy to demonstrate both by historical example and by theoretical reasoning than an influx of capital into a young, undeveloped economy will mean both internal expansion and an induced increase in imports. The rise in imports may be appropriately regarded as a leakage, limiting the rise in money incomes. But to label the import surplus as deflationary is an unrealistic attempt to segregate parts of an integral process of development. Without the influx of capital, neither the internal expansion nor the rise in imports would occur. The import surplus is a derived effect and has no independent causal status.

The interplay of forces in the shift to a creditor status with a corresponding excess of imports stands out less clearly, because here we cannot, of course, regard the modest amount of prospective income from foreign investment as sufficient within itself to produce the expansion of domestic income required to shift the trade balance. But there is at least no a priori reason to consider that the positive multiplier effects of the income receipts from foreign investments will be appreciably less than the negative multiplier effects of the sums paid out against the corresponding imports and hence no reason to suppose that the shift to a net credit or position will of itself impose any significant burden on the secular growth of the American economy.[9]

Cyclical Disturbances and Creditor-Debtor Relationships

It will have already become apparent that the validity of the foregoing analysis of the long-run prospects for a successful shift by the United States to a mature creditor position depends on the implicit assumption of a fairly regular secular growth in the domestic economy uninterrupted by severe and protracted cyclical disturbances or price fluctuations. A pronounced depression in the United States would play havoc with the hypothetical figures offered as to the future course of the principal items in the balance of payments. For example, let us suppose that in 1955, at the end of the first postwar decade, industrial production should suddenly decline by 25 per cent, entailing an equal percentage fall in the quantity of imports and producing a drop of 20 per cent in import prices. This would mean a fall of almost 3,200 million dollars in the value of imports from the level assumed herein. Suppose further that the depression should lead to a complete suspension of new foreign investment activity in place of the outflow of 2,400 millions assumed in this analysis for 1955. The total decline in dollars paid out by the United States would thrust an almost intolerable burden of ad-

[9] The effects of amortization of principal may be, of course, somewhat different from those of income receipts. In the present model, however, amortization is assumed to be largely offset by continued investment and, in fact, may be exceeded by it.

justment on foreign countries obligated to make debt-service payments of some 1,700 million dollars to the United States, exclusive of earnings on direct investments.

This is, in fact, what happened on an even more drastic scale to the balance-of-payments and international-investment relationships of the United States during the Great Depression. Under the combined influence of the fall in business activity and in prices, the imposition of the tariff of 1930, and the cessation of new foreign investment, the total amount of dollars paid out by the United States to foreign countries fell from 7,400 million dollars in 1929 to only 2,400 millions in 1932. At the same time foreign countries had contractual debt-service payments of some 900 millions due to the United States each year. Under such circumstances it was inevitable that many of these obligations should be defaulted. By comparison with the magnitude of these strains, all other explanations of the relatively unsatisfactory outcome of the past foreign lending experience of the United States must be of distinctly secondary significance. It is for this reason that I have not attempted to appraise in detail the results of that experience in analyzing future possibilities, although it should be emphasized in passing that, despite the strains described, these financial results were by no means as disastrous as commonly supposed.[10]

The most fundamental requirement for the successful outcome of renewed foreign investment is clearly that the future economic development of the United States should not again deviate unduly from the upward trend made possible by its increasing productive efficiency and growing manpower, a problem which extends beyond the scope of this paper. It is pertinent to the present analysis, however, to explore the possibilities of mitigating the effects on creditor-debtor relationships if severe cyclical disturbances should recur.

Since the ability of foreign borrowers to meet annual debt-service payments to the United States hinges to such an important extent on conditions in this country, it would be wholly logical to permit the waiver or deferment of these payments in the event of a dollar shortage induced by economic conditions or policies in the United States. A provision of this nature in future loan agreements would be desirable, not only in the interest of the debtor, but also in the interest of the creditor. As a creditor, it is clearly to the interest of the United States that systematic provision should be made for some flexibility in debt service rather than run the risk of outright default. And as an exporter, the United States also has an interest that, in times of severe strain, service on investment should not have primacy over new production and the continued flow of merchandise trade.

[10] See "Foreign Investment Experience of the United States, 1920–1940," *Hearings before the Committee on Banking and Currency*, House of Representatives, 79th Cong., 1st sess., on H.R. 2211 (a bill to provide for the participation of the United States in the International Monetary Fund and the International Bank for Reconstruction and Development), Vol. I, pp. 299–307.

Substantial recognition has already been given to the necessity of rendering debt-service requirements more flexible in time of major strains. The outstanding example is found in the proposed Anglo-American loan agreement providing that interest payments may be waived under stipulated conditions, including a finding by the International Monetary Fund that the United Kingdom's receipts from exports and from net current transactions have yielded, on the average of the preceding five years or the elapsed portion thereof after 1950, less than the sum required to purchase, with appropriate adjustments for price changes, the average annual amount of British imports during 1936–38. A more modest recognition of the principle is contained in the statutes of the proposed International Bank for Reconstruction and Development, providing in section 4(c) that:

I. The Bank may, in its discretion, make arrangements with the member concerned to accept service payments on the loan in the member's currency for periods not to exceed three years upon appropriate terms regarding the use of such currency and the maintenance of its foreign exchange value; and for the repurchase of such currency on appropriate terms.
II. The Bank may modify the terms of amortization or extend the life of the loan, or both.

Furthermore, there seems to be no reason why similar arrangements should not be made in loan agreements negotiated by the Export-Import Bank, although none of the loans thus far extended by that institution contain such provisions.

A major difficulty lies in the devising of a formula that will be sufficiently flexible and yet not open to abuse. One obvious possibility would be to provide for the waiver or deferment of debt service payments if the dollar should be declared a "scarce currency" by the International Monetary Fund under Article VII. It may be undesirable, however, to weight such already important powers with still further responsibilities. If possible, a more objective criterion would be desirable, yet it would be difficult and inacceptable to the United States to attempt to define at this time, for example, a minimum level for domestic employment or production or imports below which provisions for debt-service relief could be invoked. Furthermore, it may not be desirable that such provisions should be related only to a general shortage of dollars. On the one hand, some debtor countries might be well able to continue to meet debt service even though dollar exchange were generally short. On the other hand, even though dollars were not short throughout the world generally, individual debtor countries might be adjudged eligible for temporary relief pending adaptation, for instance, to technological developments impairing their export markets. Despite these difficulties, further careful study should permit the drafting of an acceptable formula or set of principles or procedures for rendering debtor-creditor relationships more flexible and hence more durable than they have been heretofore.

These suggestions may appear to throw an undue burden on the investor and thereby render the cost of borrowing from private sources

of savings prohibitive and tend to limit lending to government agencies. This need not be so, except to the extent that the bulk of lending may be through, but not necessarily by, official institutions. The guarantee premium to be contained in loans extended through or by the International Bank provides a means both for extending relief to the debtor and for continuing interest and amortization payments to the private investor. Article IV, Section 5 of the Bank's statutes provides that during the first ten years of its operations it shall levy a charge of 1 to 1½ per cent on loans outstanding for the purpose of building up a reserve fund against losses. The Export-Import Bank is operating *de facto* on much the same basis, since the interest rate charged by that institution averages 1 per cent or more above the cost of the funds to the government.

If, on the basis of the quantitative assumptions previously made in this analysis, one-fourth of the annual interest bill payable to the United States is assigned to a guarantee fund, the accumulated amount would total 1,500 million dollars by 1955 in the absence of losses up to that time. This would be sufficient to pay two-thirds of the interest due during the following two years, even under the extreme assumption that interest were completely defaulted or waived on *all* outstanding issues. By 1965, in the absence of losses, the reserve fund would aggregate 4,500 million dollars or almost enough to pay interest in full on all outstanding obligations for the next four years.

In reality, therefore, properly devised lending instruments and institutions, combining provisions for flexibility in service payments by the debtor with reserve funds for the protection of the creditor, should create a safer and more durable type of foreign investment than we have known in the past.[11]

Given these features, only two real dangers stand in the way of a successful future foreign investment program. One of these is the possibility of a deep and prolonged depression in the United States such as we had in the thirties. The other is the possibility that the present liberal trend in United States tariff policy might be reversed and thwart the normal growth in imports and the eventual adjustment to a mature creditor position.[12] If, however, we should have to base our decisions on the ultraconservative assumption that these problems cannot or may not be solved, there is little room for any kind of constructive international economic policy.

[11] In a very rough way, we had this sort of thing in the twenties. Calculations of losses on foreign dollar bonds usually overlook that the high yields at offering prices served to compensate in considerable part the losses suffered in later years on nominal amounts outstanding.

[12] A third potential source of danger, although probably less serious than the other two, is that even in the absence of general economic depression prices of the primary goods which bulk so large in United States imports might suffer a substantial decline as compared with prices of manufactured goods comprising the major part of United States exports. Such a "favorable" shift in the United States terms of trade would be decidedly unfavorable to the United States as a creditor nation and to the world at large.

Appendix

Foreign Investments and Interest and Dividends Under Hypothetical Assumptions,* 1946–70
(Millions of Dollars)

Year	Outflow of U. S. Capital				Inflow of Income and Amortization from U. S. Investments Abroad							Net Inflow (+) Net Outflow (−)	U. S. Investments Abroad, Outstanding at End of Year				
	Direct Investments	Portfolio Investments	Total		Prewar			Postwar			Total		Prewar		Postwar		Total
			Annual	Cumulative at end of Year	Direct Earnings	Portfolio		Direct Earnings	Portfolio				Direct	Portfolio	Direct	Portfolio	
						Interest	Amortization		Interest	Amortization							
1946	500	4,500	5,000	5,000	405	130	160	—	—	—	695	−4,305	6,758	2,440	500	4,500	14,198
1947	500	3,900	4,400	9,400	405	122	160	30	180	—	897	−3,503	6,758	2,280	1,000	8,400	18,438
1948	500	3,400	3,900	13,300	405	114	160	60	336	—	1,075	−2,825	6,758	2,120	1,500	11,800	22,178
1949	500	3,000	3,500	16,800	405	106	160	90	472	—	1,233	−2,267	6,758	1,960	2,000	14,800	25,518
1950	500	2,700	3,200	20,000	405	98	160	120	592	—	1,375	−1,825	6,758	1,800	2,500	17,500	28,558
1951	500	2,500	3,000	23,000	405	90	160	150	700	108	1,613	−1,387	6,758	1,640	3,000	19,892	31,290
1952	500	2,357	2,857	25,857	405	82	160	180	796	206	1,829	−1,028	6,758	1,480	3,500	22,043	33,781
1953	500	2,214	2,714	28,571	405	74	160	210	881	296	2,026	− 688	6,758	1,320	4,000	23,962	36,040
1954	500	2,071	2,571	31,142	405	66	160	240	959	379	2,209	− 362	6,758	1,160	4,500	25,653	38,071
1955	500	1,929	2,429	33,571	405	58	160	270	1,026	466	2,379	− 50	6,758	1,000	5,000	27,122	39,880
1956	500	1,786	2,286	35,857	405	50	160	300	1,085	538	2,538	+ 252	6,758	840	5,500	28,370	41,468
1957	500	1,643	2,143	38,000	405	42	160	330	1,135	616	2,688	+ 545	6,758	680	6,000	29,397	42,835
1958	500	1,500	2,000	40,000	405	34	160	360	1,176	694	2,829	+ 829	6,758	520	6,500	30,203	43,981
1959	500	1,357	1,857	41,857	405	26	160	390	1,208	771	2,960	+1,103	6,758	360	7,000	30,789	44,907
1960	500	1,214	1,714	43,571	405	18	160	420	1,231	849	3,083	+1,369	6,758	200	7,500	31,154	45,612
1961	500	1,071	1,571	45,142	405	10	160	450	1,247	925	3,197	+1,626	6,758	40	8,000	31,300	46,098
1962	500	929	1,429	46,571	405	02	40	480	1,252	1,002	3,181	+1,752	6,758	—	8,500	31,227	46,485
1963	500	786	1,286	47,857	405	—	—	510	1,249	1,078	3,242	+1,956	6,758	—	9,000	30,935	46,693
1964	500	643	1,143	49,000	405	—	—	540	1,237	1,154	3,336	+2,193	6,758	—	9,500	30,424	46,682
1965	500	500	1,000	50,000	405	—	—	570	1,217	1,229	3,421	+2,421	6,758	—	10,000	29,695	46,453
1966	500	500	1,000	51,000	405	—	—	600	1,187	1,304	3,496	+2,496	6,758	—	10,500	28,891	46,149
1967	500	500	1,000	52,000	405	—	—	630	1,155	1,379	3,569	+2,569	6,758	—	11,000	28,012	45,770
1968	500	500	1,000	53,000	405	—	—	660	1,121	1,452	3,638	+2,638	6,758	—	11,500	27,060	45,318
1969	500	500	1,000	54,000	405	—	—	690	1,082	1,526	3,703	+2,703	6,758	—	12,000	26,034	44,792
1970	500	500	1,000	55,000	405	—	—	720	1,041	1,599	3,765	+2,765	6,758	—	12,500	24,935	44,193

* The following assumptions are made: *Prewar investments:* Portfolio investments are amortized at the rate of $160 million per annum and interest averages 5%. Average earning on direct investments are 6% throughout the period. *Postwar investments:* Total outflow of $20 billion during the years 1946 to 1950, of $30 billion during the years 1951 to 1965, and of $1 billion per year thereafter. Of the total outflow, $500 million per year is assumed to be in the form of direct investments, the rest portfolio investments. Earnings on direct investments are assumed to be 6% throughout the period. On portfolio investments the interest rate is 4%; amortization starts 5 years after the loans are made and is continued for 25 years, when the loans are fully amortized. During these 25 years payments are made in equal annual installments covering both interest and amortization.

POSTWAR CONTROL OF INTERNATIONAL CAPITAL MOVEMENTS

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Introduction

It is now highly respectable doctrine, in academic and banking circles alike, that a substantial measure of *direct* control over private capital movements, especially of the so-called "hot money" varieties, will be desirable for most countries not only in the years immediately ahead but also in the long run as well.[2] This widely accepted point of view has been officially crystallized in the Bretton Woods Fund Agreement, which explicitly recognizes the right of each member to control capital movements, and may indeed under certain circumstances make such controls obligatory as a condition of continuing aid from the Fund.

Unfettered freedom of individuals to transfer funds across national boundaries, while conspicuously violated in actual practice since 1914, has long been a hallowed dogma of traditional economic thought, and in this respect the present-day enthusiasm among economists for exchange control over capital movements represents a sharp break with past orthodoxy.[3] This doctrinal *volte-face* reflects a widespread disillusionment resulting from the destructive behavior of these movements in the interwar years. Massive, sweeping, and highly capricious transfers of short-term funds, blessing neither the countries that gave nor the countries that received, constituted a major source of damage

[1] I have benefited from discussions with Dr. E. M. Bernstein and my colleague, Dr. H. C. Wallich. Responsibility for the views expressed, however, rests with me alone.

[2] Cf., e.g., *International Clearing Union* (British Information Services, Apr. 8, 1943), p. 17: "There is no country which can, in future, safely allow the flight of funds for political reasons or to evade taxation or in anticipation of the owner turning refugee. Equally, there is no country which can safely receive fugitive funds, which constitute an unwanted import of capital, yet cannot safely be used for fixed investment. For these reasons it is widely held that control of capital movements, both inward and outward, should be a permanent feature of the postwar system." Cf. also Hal B. Lary and Associates, *The United States in the World Economy* (U. S. Department of Commerce, 1943), p. vi: "Unless brought under control in the future, capital movements of this nature might readily nullify other efforts to obtain greater stability in international transactions and would decrease the amount of dollars available to foreigners for purchases of American goods and services." The League of Nations has likewise acknowledged the need for direct control of undesirable postwar capital movements, although with some misgivings. Cf. *The Transition from War to Peace Economy* (1943), p. 88; *International Currency Experience* (1944), pp. 187–189, 220–222; and *Economic Stability in the Postwar World* (1945), pp. 247–249. Cf. also Joan Robinson, "The United States in the World Economy," *Economic Journal*, LIV (1944), pp. 435–436: "It is clear enough in principle that private owners of wealth have no right to the liberty to move funds around the world according to their private convenience, and it is clear that, in the uneasy conditions of modern times, no conceivable international currency system can survive for long if that liberty is granted."

[3] As Lord Keynes aptly pointed out before the House of Lords on May 23, 1944: "What used to be a heresy is now regarded as orthodox." The same comment is applicable, *a fortiori*, to the common belief that exchange control over *current account* transactions may even be desirable for some countries in specific circumstances in the long run. This point of view, for example, is explicit in the Bretton Woods Fund Agreement.

to the international monetary system, and attempts to restrict these transfers by measures short of exchange control in most cases proved singularly ineffective. Long-term foreign investment was also subject to erratic fluctuations and other abuses, which similarly suggest the need for controls in the future—not so much, however, from the viewpoint of restricting the volume of such investment (indeed the opposite is in this case generally desired) as of smoothing out its flow and raising its underlying "quality." Despite the broad concensus of these matters, however, there has as yet been little analysis of the types of controls that will be needed, their manner of application, or their implications. Some of the issues involved will be examined in the present article.

In its broadest sense, and in the inclusive form in which the term will be used here, control of international capital movements may be said to embrace all official measures, direct or indirect and national or international, specifically designed to influence the volume, direction, character, or timing of short- and long-term capital transfers. So defined, control measures may range from mere discount rate policy to thoroughgoing exchange control, and, as such, have obviously been always practiced to some degree. Control may be exercised for economic or political reasons or both and, from the viewpoint of any one country, may be designed to restrict or stimulate an outflow or an inflow of capital. All these categories of control measures were in evidence during the interwar period, but attention here will be directed only to those likely to be most necessary in the future.

Characteristics and Control of Interwar Capital Movements

As necessary background to our analysis of postwar control of capital movements, attention must first be briefly directed to some interwar characteristics of these movements and to the nature and effectiveness of the measures adopted to control them. A rough distinction will be made between short-term capital movements; trade in outstanding securities;[4] and long-term capital movements.

Short-term capital movements during the interwar period differed sharply from their pre-1914 counterparts in that they were much larger, more volatile, and predominantly disequilibrating rather than equilibrating in character.[5] Massive volumes of short-term funds, to the de-

[4] While generally classified as "long-term capital movements," this category is discussed separately here because it also bears a certain affinity to "short-term capital movements" as well. Trade in outstanding securities originally floated by one country in another, however, is included in our third category.

[5] The terminology "equilibrating" and "disequilibrating" capital movements used throughout this article is similar to that employed in *International Currency Experience*, pp. 72–73 n. These terms shall refer, respectively, to movements from countries with balance of payments surpluses to countries with balance of payments deficits, and vice versa. While subject to several obvious logical shortcomings, this definition is sufficiently satisfactory and clear for our purpose. The definition, it might be noted, is applicable to "long-term" as well as "short-term" capital movements.

gree that they were not officially restricted, moved erratically from country to country at signs of currency weakness or political instability, causing disturbance and often damage to capital-losing and capital-receiving countries alike. Movements of this sort proved intractable to traditionally effective discount rate policy (indeed, they commonly reacted perversely), occurred on a scale and with a suddenness often virtually impossible or undesirable to offset by trade adjustment through deflation or depreciation, and made heavy inroads on the gold and exchange reserves of the countries of origin. Capital-receiving countries, on the other hand, were subjected to an unwelcome accumulation of foreign short-term indebtedness liable to precipitate withdrawal and an often undesirable addition to banking reserves, without any compensating benefits. Above all, these movements were predominantly disequilibrating in character, thereby increasing rather than decreasing gold drains.

Although a potent source of international financial disequilibrium, these movements were themselves a product of underlying disequilibria and instabilities. They may be conveniently grouped, without any pretense at logical tidiness or inclusiveness, into (1) movements related to domestic political, monetary or social instability (the term "capital flight" seems most appropriate here) and (2) movements associated, directly or indirectly, with unstabilizing exchange speculation. The former category included outflows of funds from a country to avoid an expected impairment of money principal from actual or anticipated wars, social and political upheavals or persecution, banking collapse, oppressive taxation, currency disorders, or inflationary price spirals. Exchange speculation, on the other hand, led to disequilibrating short-term capital transfers in essentially two ways. An anticipated exchange rate depreciation induced speculators to transfer funds from the country whose currency was under pressure in order to repatriate the funds at a profit when the expected depreciation had occurred. When the speculation took the form of selling the suspect currency forward, however, funds were transferred out of the country as cover by banks against their forward purchases of the currency and also to profit (or avoid losses) from the abnormal forward discount on the suspect currency generally induced by the bear speculation (the so-called "passive" and "active" covered interest arbitrage operations, respectively).[6]

The interwar phenomenon of large-scale unstabilizing exchange speculation, and the massive movements of funds to which it directly or indirectly gave rise, reflected the prevailing widespread lack of confidence in established exchange rates. The underlying causes of exchange

[6] These terms are used by P. Einzig, *The Theory of Forward Exchange* (London, 1937), pp. 25, 138, 173–174.

instability lay not only in poorly-chosen rates, domestic currency upheavals, and in capital flight movements based on political, monetary, and social instability, but more particularly in autonomous *Konjunktur* policies, unwillingness to follow the "rules of the game," and in deliberate "offsetting" techniques—all of which prevented the mechanism of adjustment process from operating with its pre-1914 smoothness,[7] caused exchange rates to get "out of line" more quickly, and necessitated frequent exchange rate readjustments. In other cases, exchanges were deliberately depreciated as a "beggar-my-neighbor" expedient. Speculators were usually quick to act at the first indications or expectations of a depreciation of a "pegged" rate, thereby adding pressure to the suspect currency, increasing expectations of a decline, and tending to hasten depreciation or to bring about a depreciation which might not have otherwise occurred. Similarly, a depreciating currency was often deemed a harbinger of continuing declines and provoked speculative outflows rather than inflows of funds.

International trade in outstanding securities in the interwar years was not only considerably larger than before 1914 but was also guided to a relatively greater degree by speculative considerations of capital gains on foreign stock exchanges (as contrasted with investment considerations of relative yields), and was frequently related to capital flight and speculative movements of short-term funds (the owners often preferring such securities, especially when the stock market was buoyant, to idle bank balances). Movements of capital arising out of these transactions were thus frequently of a disequilibrating character, tending further to weaken currencies already under pressure (and to subject stock-market prices in the capital-receiving countries to actual and potential disturbing effects). Another perversity of these movements was their tendency to perpetuate themselves in a self-inflammatory way; purchases of outstanding foreign securities, by tending to bid up stock prices, attracted further purchases, and so on.

Long-term capital movements in the form of foreign security flotations were also subject to erratic fluctuations and other abuses. Most conspicuous was the drastic decline of long-term foreign lending in 1929–30, which played an important part in bringing on the world depression, and its virtual cessation during the thirties, which was both a cause and an effect of the continuing depression and the widespread defaults which occurred. In fact, during the thirties the flow of long-term capital through this channel reversed itself, redemptions and repatriations of

[7] Disequilibrating short-term capital movements themselves had only a minor primary "mechanism" effect, since they were commonly drawn from idle balances or from funds borrowed from banks in the country of origin and went into idle balances (or stock-market transactions) in the country of destination.

outstanding foreign issues exceeding such new lending as took place.[8] During the twenties the flow of foreign lending, especially American, was also subject to large and disturbing year-to-year fluctuations as a result of the fluctuating prospects of profitable investment at home. As is well-known, moreover, loans were floated in many cases at exorbitantly high rates of interest; some of the lending was reckless and excessive in character; loans were predominantly fixed-interest-bearing and subject to inflexible repayment schedules; and to a substantial degree borrowings were used for purchases of domestic rather than foreign goods and services, thereby saddling borrowing countries with "avoidable" foreign debts, and, along with other factors, making long-term lending less intimately related to international movements of goods than before 1914. In the case of Britain, moreover, long-term foreign lending during the twenties, by tending to exceed the surplus on current account, was a factor contributing to the weakness of sterling.

Given the magnitude, perverse behavior, and disruptive effects of interwar capital movements generally, notably of the short-term variety, it is not surprising that a wide variety of measures was adopted, chiefly by the capital exporting countries, in an attempt to restrict their volume. These measures may be broadly grouped into (1) thoroughgoing systems of exchange control involving severe limitations on, or the virtual suppression of, the free exchange market and (2) systems of control involving no direct restrictions on free exchange dealings, or only mild restrictions on such. Faced in the early thirties[9] with sudden withdrawals of foreign credits and a flight of national capital, and fearful of having their gold and foreign exchange reserves swept away, many countries had no satisfactory alternative but to adopt exchange control. In countries where gold and foreign exchange reserves were substantial, however, and where the pre-1914 belief in the sacredness of free exchange markets still exerted a strong hold, less rigorous and more indirect means of curbing undesirable capital movements within the framework of free exchange markets were attempted, such as official manipulation of spot and forward exchange rates, discount rate policy, and the like. Measures of this sort, when adopted, proved generally unsuccessful, largely because of the magnitude and underlying character of these movements; in fact, by strengthening anticipations of exchange depreciation or direct controls, they often intensified rather than reduced disequilibrating capital outflows. Capital flight transfers were particularly unresponsive to indirect control measures, since their essential motivation was to avoid losses; movements of funds related to

[8] These repatriations were of an abnormally large character, being induced by the low prices to which the bonds in question had fallen as a result of defaults.

[9] Exchange restrictions in varying degrees of intensity (but subject in most cases to widespread evasions) also prevailed in most countries during World War I and the currency upheavals of the early twenties.

exchange speculation or to wide discounts or premiums on forward exchange, however, at times proved somewhat more tractable to such control. In some cases the authorities attempted to check unwanted outflows of funds in a more "direct" way by mild formal restrictions upon specific operations, or by mere informal appeals to the market to refrain from undertaking such (e.g., speculative spot sales of the national currency, covered interest arbitrage operations, or purchases of securities on foreign stock exchanges); banks were asked to co-operate by refusing loans to their customers when deemed for these purposes and by scrutinizing all requests for foreign exchange so as to reject those not believed connected with genuine "commercial" transactions. In nearly all cases indirect controls were unilaterally applied, chiefly by the capital-losing countries, and there were only relatively few examples of co-operative action.[10] In general, however, monetary authorities in countries which did not adopt exchange control tended more commonly to be absorbed with *offsetting* the effects of these transfers upon exchange rates, generally in the passive form of attempting to hold rates steady (when not pegged to gold) by freely selling or buying exchange, and upon domestic money market conditions by neutralization procedures, than with pursuing policies designed to restrict their volume.

Controls and supervision were also exercised in the chief long-term lending countries over the flotation of foreign securities on their domestic markets. During most of the interwar period Britain maintained a general embargo, except with Treasury permission, on all foreign flotations or specific categories thereof, and this embargo, which was based solely on informal "requests" to the market, was applied with differing degrees of severity and inclusiveness over the period. Its primary purposes were to protect sterling against sudden and dislocating strains and to enable more effective control of the domestic long-term rate of interest. A similar general embargo on foreign issues, although statutory in character, primarily motivated by political considerations, and vigorously applied, prevailed during the interwar period in France, where opposition to foreign lending was strong. Control in the United States,

[10] In some instances credits were extended by the monetary authorities of one country to those of another at times of heavy pressure on the latter's currency, and these may have often indirectly checked the movement of capital by reducing anticipations of an exchange depreciation. On the other hand, the effects were frequently perverse by underscoring the weakness of the capital-losing country's position and the scarcity of its pre-existing reserves. (Inter-stabilization fund co-operation under the Tripartite Agreement of 1936, however, provided for no *genuine* mutual currency support.) On several occasions monetary authorities co-operated to help other countries whose currencies were under attack by imposing restrictions on speculation by their nationals against those currencies. In 1927 the Federal Reserve System reduced its discount rates in order to assist capital-losing countries, but, by stimulating the stock market, this action had a perverse effect. Another illustration of co-operation was the practice of some central banks during the twenties of refraining from withdrawing their balances from countries whose currencies were under pressure; e.g., the delay on the part of the Bank of France in liquidating its foreign exchange holdings before 1932. The special case of mutual provision of information regarding foreign balances will be discussed below.

however, was far milder. A relatively few specific foreign issues were embargoed during the twenties, chiefly for noneconomic reasons, under the State Department ruling of 1922; a general embargo was placed under the Johnson Act in 1934 upon new private loans to foreign governments which had defaulted on their war debts to the United States; and an attempt was made under the Securities Acts of 1933 and 1934 to check "unsound" foreign lending indirectly by specifying that detailed information had first to be furnished concerning each prospective foreign issue. Nothing was done, however, to prevent sharp fluctuations in American foreign lending, least of all the drastic decline in 1928–29, nor to stimulate such lending during the thirties.

Postwar Control of Capital Movements

As a result of the characteristically disturbing behavior of capital movements in the interwar years and of the generally unsatisfactory results of attempts to control them by indirect methods (where such attempts were made), it is now widely agreed that more active and rigorous measures of control will have to be adopted if the international monetary system is to function efficiently in the future. Two leading types of control problems should, however, be sharply distinguished. The first problem, which will be our primary concern here, is to harness disequilibrating private capital transfers, chiefly associated with capital flight, speculative attacks and international stock market speculation, by direct restrictions (while giving free scope to equilibrating private transfers). The second problem is to raise the volume of long-term international investment, reduce the erratic and perverse fluctuations which characterized it in the past, and to improve its underlying "quality." The Bretton Woods Agreements provide a framework within which both of these problems may be tackled and analyzed.

Little need be said about the problem of control in the early postwar years. Most countries are likely to be forced by the pressure of events not only to maintain restrictive controls over capital exports but also, in the absence of special assistance, to take advantage of the Bretton Woods transitional arrangements to continue exchange controls over current account transactions as well. With limited reserves of freely disposable gold and foreign exchange (including such aid as might be obtained through the International Fund and Bank) relative to tremendous import requirements for reconstruction and for satisfying long-deferred civilian needs, and unable for some time to export freely, most countries will not be in a position to permit the luxury of "unessential" overseas expenditures on current account, least of all unrestricted freedom of private capital exports. It may be presumed, however, that exchange controls over current account transactions will be gradually

relaxed; indeed within five years after the Fund commences operations they must, in general, be removed altogether.[11]

Rigid restrictions over outward capital movements will be especially necessary for most countries during this period. Disturbing political, social, and economic instability over a large part of the world—the inevitable aftermath of the war—would, in the absence of adequate controls, provoke sweeping flights of capital from European and other countries to places of refuge, notably the United States. The currently widespread existence of exchange rates deemed to be substantially "overvalued" vis-à-vis the dollar, moreover, and the strong likelihood of their depreciation would also tend to subject the suspect currencies to heavy speculative attacks and lead to massive outflows of short-term funds. Even if the exchange rates concerned are depreciated substantially to more "appropriate" levels before agreed upon with the Fund as the initial par values of their currencies, there is every possibility for some time thereafter of large and frequent rate readjustments within the Fund framework in view of differing rates of internal price movements, reconstruction and reconversion, and of the natural difficulties of hitting, *ad hoc*, on an initial "equilibrium" pattern of exchange rates. If there were no rigid controls, then, many currencies would become a favored playball of speculators, with disruptive external and internal effects. The possibility of sweeping movements of short-term funds from these causes would be greatly enhanced by the highly expanded supply of money and liquid assets in the hands of the public in most countries as a result of wartime inflationary finance, financial depradations by enemy nations, or balance of payments surpluses. These inflammatory factors make it all the more necessary for most countries to continue restrictions upon exports of capital by nationals and withdrawals of existing foreign-held balances, unless perhaps directly tied to exports of goods or services. For Great Britain, by far the largest short-term foreign debtor, it will be necessary to repay the bulk of its external liabilities only over a rather lengthy period of time, with the initial repayments generally not to commence for several years.[12] These considerations do not, of course, apply to the United States. It has been officially reported that by June 30, 1946, our Foreign Funds Control will have been largely wound up and virtually unrestricted freedom of outward capital movements, both foreign and domestic, restored. With

[11] In the case of Great Britain, however, exchange control over current account transactions must, in general, be removed within one year from the effective date of Anglo-American Financial Agreement.

[12] According to the Anglo-American Financial Agreement Britain is committed to make agreements with its individual creditors for an early settlement of these liabilities. Under these settlements a (presumably very small) fraction of the foreign sterling balances is to be paid off at once, part "adjusted" (i.e., canceled), and the remainder paid off over a period of years beginning in 1951.

huge gold reserves and a strong active balance of payments on current account, this country could look with complete equanimity upon (and indeed welcome) any large and sustained outflow of funds for some time. In any case, any "outflow" of foreign funds in our market which would occur over the next few years would primarily reflect foreign purchases with these funds of American goods and services.

For some time to come, in fact, capital movements will be predominantly equilibrating rather than disequilibrating in character, and will involve monetary authorities, either national or international, as their chief principals. Capital transfers will arise primarily from (1) the drawing down by monetary authorities of foreign balances to meet balance of payments deficits with the countries concerned (e.g., the case just cited); (2) accumulations of foreign balances by monetary authorities as a result of specific balance of payments surpluses (e.g., by sterling area countries vis-à-vis Britain); (3) long-term foreign lending by governments and by (or through) the International Bank; and (4) the operations of the International Fund. The first two categories of capital movements, obviously, will be equilibrating in character. The third will also be predominantly of this sort, inasmuch as long-term foreign loans will tend to be made only by (a few) countries with balance of payments surpluses (and whose markets are organized for such loans) to countries with deficits. Countries with deficits in their balances of payments and/or small external reserves are, in fact, specifically protected against having to make any long-term foreign loans as a result of their membership in the Bank by their power to veto the Bank's right to make direct loans out of their initial currency contributions, to borrow in their markets for direct lending purposes, or to guarantee private foreign loans floated therein.[13] Close control of the new issue market in such countries, moreover, will likewise make it possible to block any other undesired foreign loans. The mechanical operations of the Fund will also involve equilibrating capital movements. When selling a specific currency to a member to finance a specific deficit, the Fund will draw down its balances in the "surplus" country and build up its balances in the "deficit" country; i.e., there will be an equilibrating capital transfer from the former to the latter.[14]

Long-Run Control of Disequilibrating Capital Movements. Of more interest is the problem of controlling capital movements in the longer

[13] Some members might perhaps be willing to permit long-term foreign loans if they were assured that virtually all the proceeds would be spent on domestic goods. Under the veto powers, members could effect this as far as loans made out of their original currency contributions to the Bank were concerned, but not with respect to Bank loans from funds borrowed in their markets or private loans guaranteed by the Bank and floated therein.

[14] It will be noted that the terms "surplus" and "deficit" refer here to the specific, bilateral surplus and deficit between the two countries concerned, and not to their global balance of payments positions. The expression "equilibrating capital transfer" is thus used here, and in (1) and (2) above, in a somewhat narrower sense than elsewhere in the article.

run, when the abnormal conditions prevailing in the early postwar years need no longer exist. In this connection the major problem will be to prevent a recurrence of the massive disequilibrating capital movements so common in the interwar period. Far from yielding tangible benefits, these movements left nothing but disturbance and damage in their wake, and appear in retrospect to have been a luxury which few countries can afford in the future.

The most desirable and common-sense way of preventing such movements would, of course, be to remove their underlying causes, notably political, monetary, and social upheavals, and the factors making for exchange instability. For example, the international economic and political organizations[15] now in existence or contemplated, if coupled, *inter alia*, with co-ordinated antidepression policies, appropriately chosen levels of exchange rates, and liberalization of commercial policies, would go a long way towards removing these underlying causes and thereby reducing the inducement to disequilibrating capital transfers. Alternatively, if all countries were equipped with very large external reserves or were prepared freely to hold balances in other countries, disequilibrating capital movements could perhaps be permitted with relative equanimity, merely their internal effects being offset by appropriate neutralization policies; under such conditions, in fact, the possibility of such movements, at least so far as they were related to anticipated exchange rate adjustments, would be reduced.

In the absence of such favorable conditions, most countries will have to restrict these movements deliberately by specific control measures. Interwar experience demonstrated that indirect methods of control were generally inadequate to the magnitude of the task; indeed, they commonly aggravated rather than alleviated the problem by underscoring the weakness of the currencies involved. While capital movements associated directly or indirectly with exchange speculation were at times susceptible to indirect controls, capital flight movements were almost wholly intractable to such. In any case, the possibility of checking exchange speculation by wide, officially-manipulated fluctuations in exchange rates—perhaps the most promising indirect method of control over such speculation[16]—would seem to be out of the question under

[15] While the Bretton Woods organizations might contribute to a diminution in the inducement to disequilibrating capital movements, as far as these are related to anticipated exchange rate adjustments, by establishing an international code of rules for such adjustments, providing for an orderly pattern of international monetary organization and for aid to countries faced with balance of payments deficits, and by laying the basis for a large volume of planned productive foreign investment, they can do little or nothing, per se, to stem capital flight movements based on political instability, social disorders, or domestic currency upheavals. Even their beneficial effect in the former connection, moreover, might be offset (in the absence of control over short-term capital movements) if the Fund is generous in sanctioning exchange rate adjustments by liberally interpreting the term "fundamental disequilibrium."

[16] Professor Graham has argued, for example ("Achilles' Heels in Monetary Standards," *American Economic Review*, Mar., 1940, pp. 16–32) that monetary authorities, instead of

the Fund Agreement.[17] It would appear, then, on the assumption that disequilibrating capital transfers will tend to occur on a large scale in the future as in the past, that the only practicable solution, where gold and exchange reserves are not large, is the imposition of direct controls. Even capital-receiving countries may find it desirable at times, if only to co-operate with the capital-losing countries, to impose direct restrictions upon the inflow of capital. That direct measures may be necessary and even desirable in the long run (as well as in the transitional period) is explicitly recognized in the Fund Agreement, which specifies that "members may exercise such controls as are necessary to regulate international capital movements." This clause explicitly sanctions controls which are likely in any case to be widely prevalent.

Indeed, the whole philosophy of the Bretton Woods Agreements is generally opposed to disequilibrating capital movements, and a state of affairs is envisaged in which such movements will in fact be closely controlled by most countries.[18] Before discussing the nature and implications of these controls, then, it is necessary to examine the relevant provisions in the Fund Agreement. Among other things, it is specified that a member may not make net use of the Fund's resources to meet a large or sustained outflow of capital,[19] and the Fund may request a member (as a condition of obtaining aid from the Fund) to exercise controls to prevent such use of its resources.[20] As long as the net outflow

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attempting passively to hold exchange rates fixed in the face of speculative pressure, should have instead permitted and induced appreciable upward *and* downward fluctuations within fairly wide limits with the deliberate intention of injecting a lively element of doubt in the minds of speculators and of occasionally "punishing" them by bear squeezes. While a skilfully-managed policy of this sort might have enabled the frequent outwitting and trapping of speculators and thereby reduced their willingness to ply their trade, it could also be reasonably argued that substantial and presumably frequent exchange rate adjustments might instead have intensified speculative activity and the associated movement of funds. Unless the authorities were equipped with very large resources, moreover, such a policy might at times have caused the situation to get completely out of hand in view of the self-generating tendency of exchange speculation in the face of fluctuating exchange rates. Above all, such fluctuations would have had disturbing effects upon foreign trade and domestic activity.

[17] The Fund Agreement provides that the maximum and minimum rates for spot exchange transactions shall not differ from parity, by more than 1%, and, in the case of other (presumably forward) exchange transactions, by a margin which exceeds the margin for spot transactions by more than the Fund considers "reasonable." The official buying and selling prices of gold shall be fixed by the Fund at a margin above and below parity, presumably close to the margin for spot exchange transactions. Finally all exchange rate adjustments will be closely circumscribed by the Fund's regulations and, except for the first 10% adjustment, will be sanctioned only in case of a "fundamental disequilibrium."

[18] This was even more explicit in the White Plan, under which each member was to agree "to discourage the excessive accumulation of foreign exchange reserves and gold by its nationals" and "to co-operate effectively with other member countries when such countries, with the approval of the Fund, adopt or continue controls for the purpose of regulating international movements of capital."

[19] By "capital transactions" the Fund Agreement not only excludes current account transactions (as commonly understood), but also all payments connected with "normal short-term banking and credit facilities" and "payments of moderate amount for amortization of loans or for depreciation of direct investments."

[20] Likewise, a member cannot use the Fund's resources, except with the Fund's permission, to acquire a foreign currency to hold against forward exchange transactions. Presumably the

is not "large" or "sustained," however, nor is related to "transactions of reasonable amount required for the expansion of exports or in the ordinary course of trade, banking or other business,"[21] the Fund will not object to the use of its resources to finance such a net outflow. It is clear, then, that what the Fund opposes (at least to the extent that its resources are involved) are large, disequilibrating transfers; the Fund's resources are properly to be reserved primarily for financing international trade in goods and services. Obviously, the Fund would not wish to force a country into possible exchange control merely because it is a net exporter of only a moderate amount of capital. A member may, in fact, freely export capital to an unlimited extent, even if the outflow is disequilibrating in character, provided only that its own and not the Fund's resources are drawn upon; i.e., that the outflow is financed out of pre-existing reserves held by the member or out of a current balance of payments surplus. It might be noted that the Fund's refusal to finance large and sustained capital movements apparently applies to official as well as private outflows, and to movements of foreign as well as domestic funds from a given member country (provided, in general, that the foreign funds have not been "recently" acquired as a result of current transactions with the country concerned and that their withdrawal is not required by the owning country to make payments elsewhere for current transactions).[22]

The above-mentioned provisions, obviously, do not mean that the Fund must scrutinize each request for foreign exchange in order to determine whether or not such request involves a capital transfer of the types prohibited. Indeed, such a task would be both practically and conceptually impossible in view of the fact that members will not approach the Fund for foreign exchange to finance specific, identifiable transactions, but only to meet over-all deficits, compounded of a multitude of different transactions. What is meant, of course, is that the

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Fund would grant such permission if these transactions were the result of legitimate commercial operations. It is also specified that the Fund's resources are not to be used to deal with "international indebtedness arising out of the war." It is not clear, however, whether or not this prohibition would apply if the amounts of such indebtedness paid off each year with the aid of the Fund's resources were not "large" or "sustained."

[21] While not defined, such transactions would apparently include acquisition of foreign exchange as normal working balances, grant or repayment of short-term trade credits, and the like.

[22] As an exception to the Fund's general refusal to finance large and sustained net capital outflows, however, it is sensibly provided that if the Fund's holdings of a member's currency have remained below 75% of its quota for an immediately preceding period of at least six months (75% generally being the "equilibrium" level which indicates that the member has obtained no net aid from the Fund), that member may freely buy foreign currencies from the Fund to transfer capital (or for any purpose), but only to the extent that the Fund's holdings of its currency are not raised above the 75% level, or that the holdings of the currency required are not reduced below 75% of the quota of the country concerned. In this case, use of the Fund's resources for transferring capital would have the beneficial effect of tending to restore the "equilibrium" distribution in the local currency assets of the Fund.

Fund will not permit its resources to be used on a large or sustained scale if the member concerned is concurrently a net exporter of capital on such a scale. Stated in this way, the problem largely resolves itself[23] into one of obtaining regular and reasonably accurate reports from individual members regarding matters related to their balance of payments positions so as to enable the Fund to ascertain whether or not, and the extent to which, its resources are being used, in effect, to finance capital transfers. The Fund Agreement provides that members, if requested by the Fund, must furnish information (on a national basis) regarding, among other things, their balance of payments transactions (including capital items), international investment position, and holdings of foreign exchange. The Fund, on the basis of such data and of its intimate daily contact with the international exchange market, should generally be able to tell without great difficulty, although not with exactitude, whether any large or sustained net outflows of capital are being financed by the Fund's resources, and can request the countries concerned, as a condition of continuing aid, to restrict these outflows. To be sure, a time lag will be involved with respect to information derived from reports, but this need not be a major obstacle. For, if the net capital transfer were large or sustained, the Fund would be likely to know about it almost at once, while, if not, the Fund would probably not in any case object. If it were found, however, on the basis of regular reports, that in the preceding period the Fund's resources had, unknown to the Fund, been used in this way, the Fund could limit the subsequent use of its resources to the countries concerned and could indeed declare these countries ineligible in this respect altogether.[24]

As already suggested, there is nothing in the Fund plan which makes it obligatory for members to restrict outward capital movements as long as those movements do not involve large or sustained net drafts upon the Fund's resources. This qualification, however, strengthens the likelihood that for some time to come close controls over private capital exports in general, except perhaps for countries with strongly active balances of payments or large external monetary reserves, will be widely practiced. Moreover, although the Fund will not object to financing

[23] The following comments admittedly make the problem appear much simpler than it really is. There will be many pitfalls and difficulties of interpretation associated with the actual administration of these provisions.

[24] In the repurchase provisions (V, 7) the Fund also has at hand a mechanism which, at least in part and under specific conditions, will make it possible (although the provisions are much more broadly conceived) to "undo" capital exports effected by use of the Fund's resources and to "recapture" the currencies involved. While these complicated provisions cannot be analyzed here, a single, highly simplified example of their operation may illustrate our point. If, e.g., during a given year a country makes net drafts upon the Fund of $100 million, but its monetary authorities, banks, or private citizens accumulate dollar balances of $100 million, that country must, if the specific conditions are met, turn over to the Fund that amount of dollar balances in exchange for its local currency sold to the Fund.

relatively small or irregular capital exports, countries which are currently making (or anticipate making) large net drafts on the Fund to meet deficits on current account (after making allowance for capital imports) may even choose to restrict capital exports of this character so as to prevent unnecessary utilization of their drawing rights in the Fund. Some countries in a relatively strong position which do not need to make net use of the Fund's resources may also desire at times to discourage certain categories of private capital exports so as to acquire larger external reserves (including drawing rights in the Fund) than would otherwise be the case, or to limit drains on existing reserves (if their balances of payments are passive). Each country is of course perfectly free to be the judge of what type of controls, if any, to impose, provided only that these controls are sufficiently effective to prevent any large or sustained net drain on the resources of the Fund.

Countries with large balance of payments deficits and limited external reserves, and threatened with heavy outflows of capital, will undoubtedly find it necessary to adopt rather stringent direct controls. A mere legal prohibition upon capital exports will not, of course, be sufficient. Experience has shown that all balance of payments transactions will have to be supervised, all requests for foreign exchange carefully scrutinized so as to reject those not deemed connected with legitimate transactions, and a careful record kept (by export licensing, checking of export invoices, etc.) of foreign exchange currently accruing to nationals so as to make effective its sale to the authorities. Where the urge to export capital and to evade the regulations is particularly strong, however, and the authorities are anxious to close all loopholes, more rigorous measures will also be necessary, including censorship of the mails, searching of all individuals leaving or entering the country, and very strict penalties for transgression. Under such conditions, moreover, an official monopoly of all foreign exchange transactions and a suppression of all free exchange dealings seem inevitable. Certain unavoidable loopholes would still remain, but evasions under such a framework could generally be kept to a minimum.

Many countries in a relatively weak position, however, will not have to adopt such stringent measures of exchange control. For one thing the Fund does not object to financing moderate amounts of net capital exports, and the countries concerned, unless they were unwilling to permit *any* dissipation of their reserves and their drawing rights in the Fund in this way, would not have to try to make their exchange restrictions airtight. In many countries, moreover, the market can be depended upon to co-operate to a high degree with the wishes of the authorities, with the result that some of the more objectionable control measures, such as censorship of the mails, need not be introduced, and

the administration of the regulations might safely be left in the hands of licensed banks and dealers. In such cases, in fact, banks may also be granted considerable freedom to engage in international short-term credit operations, and general licenses may be granted to the market as a whole covering certain types of capital transactions, with limits set for individual parties. Even export licensing may not be necessary if the authorities can reasonably rely upon exporters to turn over the bulk of any foreign exchange which they may be acquiring. In countries where exporting houses are large and few in number, it is in any case generally easy for the authorities to keep a close tab on foreign exchange which these houses are acquiring. Countries in a relatively strong position which wish to discourage certain types of private capital exports could, of course, adopt very mild restrictions, and might rely merely upon hortatory appeals to the market to refrain from such exports and seek the purely voluntary co-operation of banks and brokers. In all cases, however, countries are likely at least to collect regular statistics regarding the volume and character of capital transactions through their markets (such information may in any case be requested by the Fund) so as to be better able to keep close check on international movements of funds and to take appropriate remedial action when deemed necessary.

At any moment, then, there is likely to be, with regard to countries practicing controls over outward capital movements, a whole spectrum of such controls, ranging from mild indirect measures to thoroughgoing systems of exchange restrictions (with the latter tending to be most in evidence), and depending upon such factors as the country's underlying balance of payments position, the state of its external reserves, its wilingness to utilize these reserves to finance capital exports, the strength of the inducement to export capital, and the degree of co-operative response likely to be forthcoming to the restrictions imposed. On the other hand, no controls need, of course, be in existence in countries with strong and persistent active balances of payments and large external reserves. Indeed, controls in such cases would be generally detrimental to the efficient functioning of the international monetary system, in that they would tend to check equilibrating outflows of private capital, especially of the long-term varieties (to the degree that such capital would have moved to countries with deficits in their balances of payments), and thereby result, *ceteris paribus*, in greater drains on the reserves of these countries than would otherwise prevail. Inasmuch as any given country's international financial position is likely to change appreciably from time to time, one might theoretically expect controls over outward capital movements (or the application of the controls as distinct from their machinery) to be alternately tightened, relaxed, removed, or reimposed in individual countries. There is a danger, however, that once

a country has imposed restrictions over capital outflows in the face of weakness in its underlying position, it may be reluctant, whether from excessive caution, bureaucratic predilection for such restrictions, or sheer inertia, to relax or remove these restrictions when its position has appreciably strengthened and their rationale no longer exists. In short, controls over outward capital movements originally designed to check private disequilibrating outflows may later come to block private equilibrating outflows as well. While admittedly this consideration need not always be quantitatively important, it would at least appear that the Fund should be specifically authorized to request the relaxation or removal of such controls when the underlying position of the country concerned no longer seems to justify them.[25] The use by members of exchange controls over current account transactions is carefully circumscribed in the Fund Agreement; should not some restrictions be similarly imposed upon the use of exchange control over capital transactions?

Although members may freely impose restrictions over capital movements (which in most cases will necessitate supervision of all balance of payments transactions if these restrictions are to be effective), the Fund Agreement explicitly provides that, except for the transitional period and with regard to a currency declared scarce, a member may not "exercise the controls in a manner which will restrict payments for current transactions or which will unduly delay transfers of funds in settlement of commitments"; i.e., exchange controls may not be used to restrict current account transactions.[26] This provision raises some points of interest. For one thing, it is clear that members, although debarred from using exchange control in this way, would still be free to accomplish much the same result, should they so desire, by means of import licensing (at least to the extent that this practice is not proscribed under other international agreements). Furthermore, despite the fact that the term "current transactions" is specifically defined in the Agreement, there will inevitably be many fine borderline cases between "current" and "capital" transactions which will create delicate definitional problems and provide scope for some evasion of the prohibition.

[25] Included in the controls that might be made subject to limitations would also be the members' veto rights (granted in the Bank plan) over loans made by or through the Bank in their currencies. On the other hand, it might be perfectly justifiable for a country with a strong over-all external position to restrict private capital outflows, even in the long run, to *specific* countries with which it has passive balances if the currencies of these countries tend to be "scarce," while freely permitting such outflows elsewhere. Thus, for some time to come, countries with over-all active balances are likely, for legitimate reasons, to continue to restrict private capital movements to the United States, and may even do so if their balances of payments with this country are active as well.

[26] Elsewhere in the Agreement it is similarly specified that, with the above-mentioned exceptions, "no member shall, without the approval of the Fund, impose restrictions on the making of payments and transfers for current international transactions."

Moreover, the temptation to use the controls to restrict current account transactions (which will be formally exempt under a general license) may often be very strong, if not irresistible. As Professor Viner has aptly warned, "the instrument is so powerful, so flexible, so versatile, that, once introduced, its operators tend to succumb to the itch to experiment broadly with its possibilities."[27] Interwar history has demonstrated, in fact, that exchange control, originally introduced in most cases to stem an outflow of capital, commonly came to be used as an instrument of quantitative trade regulation and trade discrimination as well, although admittedly other special factors contributed to this unhealthy development. The possible danger of considerable abuse of exchange control in the absence of adequate policing by the Fund cannot, therefore, be overlooked. On the other hand, the fear that foreign trade will be unduly hampered by the filling out of forms and the possible red tape and frequent delay associated with supervision of all balance of payments transactions seems somewhat exaggerated. Wartime experience has shown that exchange control can be exercised in most countries with considerable smoothness and efficiency in regard to these matters.

The preceding discussion has centered chiefly around the question of restrictions over the export of domestic capital, and attention must now be directed to the problem of control over outflows and inflows of foreign capital. The Fund Agreement imposes certain commitments upon members with regard to the convertibility of foreign balances. With certain specified exceptions (e.g., when the member in which the foreign balances are lodged is no longer entitled to purchase foreign currencies from the Fund, where the balances have been acquired prior to the termination of the "transitional arrangements," or when the currency of the member wishing to withdraw the balances is declared scarce), members are obligated to permit the conversion of foreign-owned balances to the extent that such balances have been recently acquired as a result of current transactions, or to the extent that the conversion is necessary to make payments for such transactions.[28] No obligation is imposed upon members to permit the free withdrawal of foreign-held balances which do not meet these conditions, nor of foreign long-term capital invested in their territories, and countries in a weak balance of payments po-

[27] Cf. J. Viner, "Two Plans for International Monetary Stabilization," *Yale Review*, Autumn, 1943, p. 103.

[28] The relevant clauses are VIII, 4, which lists the various exceptions to this provision but which covers only balances held by "members" (as contrasted presumably with balances held by their nationals), and the more general VIII, 2. The obligation to convert such balances can be apparently satisfied merely by conversion into the currencies of the members concerned, and no conversion into any foreign currency requested or into gold is necessarily postulated. Members are also presumably obligated (except for the transitional period and with regard to a scarce currency) not to block repayment of short-term foreign banking loans and credits, since these are defined as "current transactions."

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sition may choose to restrict such withdrawals, under their general power to control capital movements, when the amounts involved threaten to be large. Some countries which normally depend heavily upon foreign capital for productive investment, however, may be reluctant to impose restrictions of this sort, even when they appear necessary, for fear of deterring an inflow of such capital in the future. Instead they might find it desirable to "guarantee" beforehand the free withdrawal of foreign capital and to confine their exchange restrictions, if any, to domestic capital alone.

The problem of control over inward capital movements may be discussed more briefly. Countries in need of long-term capital to finance overseas expenditures for reconstruction and development will, of course, welcome foreign capital for productive investment, and indeed solicit it by placing loans abroad. Control by these countries over capital inflows, if such control exists, would probably consist merely of supervision by the authorities of the overseas borrowings of local governments or domestic corporations so as to reduce the possibility of an "excessive" accumulation of foreign debt, or of restricting, for political reasons, the extent of foreign ownership in specific domestic industries or natural resources. Similarly welcome to countries with over-all balance of payments deficits would be equilibrating short-term capital inflows in the form of balances piling up on behalf of surplus countries.

From the viewpoint of countries with strong balance of payments positions there is, theoretically at least, the possibility of having to introduce direct controls over unwanted disequilibrating capital inflows associated with exchange speculation, capital flight, or speculative foreign purchases of domestic stock exchange securities. In actual practice, however, such controls will probably not be necessary, largely because these movements are likely to be closely restricted in their countries of origin (except, perhaps, to the extent that the latter have large reserves and do not draw heavily upon the Fund). Even if at times capital inflows were appreciable in size, it would generally be preferable for the receiving countries merely to neutralize their effects upon the credit system rather than to adopt direct controls.[29] Resort might also be had to indirect measures of control, such as stiff taxes on income received by foreigners from trading in domestic securities, or heavy service charges on foreign-owned deposits, but these would probably not be very effective. On the other hand, it may often be desirable for the

[29] An interesting scheme of control over inflowing foreign funds, especially appropriate to conditions of domestic full employment, was introduced in Argentina in 1943. All such funds, when not destined for productive investment, are blocked so far as their internal use is concerned, and 100% reserves have to be maintained against them by the commercial banks. This scheme not only insulates the credit system against the inflows and later possible outflows of these funds, but prevents the possibility of their inflating the active money supply and stock and security values generally.

countries receiving private disequilibrating capital inflows to co-operate with capital-losing countries that are attempting to check these movements, but are unable to prevent large outflows. Countries to which a large volume of such funds is moving may have a definite interest in providing such co-operation if it would reduce the possibility of their currencies being declared scarce and thus of special restrictions being sanctioned by the Fund against foreign purchases of their goods and services. While exchange control over capital inflows would be the most effective means of co-operation, e.g., in the form of refusing to permit deposits or the acquisition of domestic securities by residents of the capital-losing countries unless certified by the authorities of the latter, it is not likely, however, that countries would generally be willing to co-operate to this extent.[30]

A helpful method of co-operation in checking capital movements unauthorized by the exchange control regulations of the countries of origin, but one not likely to be regularly practiced in the future, would be the mutual exchange of information between monetary authorities regarding deposits and other assets held by individual residents of one country within the territory of another.[31] A limited degree of co-operation in this form was provided for during the interwar period in a series of reciprocal tax assistance agreements designed to check tax evasion (but not capital movements per se). Where information was regularly furnished under these agreements, however, its range was decidedly restricted in character, while in other cases specific data was provided only on request and under specific conditions. Each party, moreover, reserved the right to refuse any information when national interests were deemed involved or individual rights were violated. Recently there have been a few instances of more ambitious arrangements for reciprocal provision of data specifically designed to help monetary authorities to recapture assets abroad which were illegally acquired during the war or held in violation of regulations.[32] It is not likely, however, that countries will

[30] The Fund Agreement provides merely that members may, by mutual accord, co-operate in measures for the purpose of making the exchange controls of either member more effective, although it is specified that exchange contracts in any member's currency which are contrary to that member's exchange control regulations shall be unenforceable in the territory of any member. There is also a somewhat ambiguously-worded provision committing members to prevent transactions in foreign currencies within their markets at rates outside the official limits (i.e., to check black market trading). The White Plan had actually envisaged exchange control over inward capital movements by specifying that members, when requested by the Fund, co-operate by such measures as refusing to accept or permit the acquisition of deposits, securities, or investments by nationals of any members imposing restrictions on the export of capital. The Keynes Plan had expressed the hope that capital-receiving countries would adopt exchange control over capital inflows.

[31] Such reciprocal provision of information was clearly provided for in the White Plan.

[32] For example, the Anglo-French Financial Agreement of March, 1945, provided that the two governments would make available to each other any information they might possess regarding existing assets held by the nationals of the one country in the territory of the other. Recent agreements by our Foreign Funds Control with various European countries provide

be willing to co-operate in this way in the future on any appreciable scale, largely because of the widespread disinclination to violate the so-called "inviolability of banking secrecy."[33]

Control of International Investment. Some references were made in the preceding section to the control of long-term capital movements, but primarily only as part of the broader problem of restricting disequilibrating capital transfers in general. Countries with weak balances of payments and limited reserves will obviously have to curb these movements (unless perhaps they are directly tied to movements of goods), along with capital outflows in general. Control of international investment, however, has a broader meaning, and has direct relevance only to the comparatively few countries, most notably the United States, which are likely to invest abroad on a large scale. The control problems here are essentially to raise the quantity and quality of such investment and, above all, to prevent it from undergoing wide and disturbing fluctuations as in the past. These problems may be briefly touched upon from the viewpoint of the operations of the International Bank.

The Bank should prove a highly effective instrument in enlarging the volume of international investment and in improving its underlying quality. Apart from foreign loans which it will make directly out of its own funds, the Bank will be primarily concerned with granting loans out of funds borrowed in the chief lending countries and with guaranteeing loans floated therein.[34] The fact that private investors will now be enabled to lend abroad in the form of purchasing the Bank's own debentures or foreign issues guaranteed by the Bank should go a long way to offset the general hostility to foreign lending which resulted from the unhappy experiences of the thirties.[35] Further contributing to the willingness of investors to lend abroad through the facilities of the

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that blocked private dollar assets owned by residents of these countries will be unfrozen only upon certification of the governments concerned; these arrangements constitute an indirect method of furnishing information regarding private holdings, since the owners will be indirectly forced to divulge these holdings to their governments, or otherwise have to forego their use.

[33] The strength of this disinclination is explicitly recognized in the Fund Agreement, where it is provided that members, when requested to furnish specific information to the Fund, are under no obligation to do so to an extent which would disclose the affairs of individuals and corporations. The force of the argument was also recognized by a League of Nations Committee at the Second Regional Tax Conference at Mexico City in July, 1943, which, in drawing up model bilateral conventions for the prevention of international tax evasion, carefully limited the types of information to be mutually provided and specified that such information could be refused if it violated professional, industrial, or trade secrets, or involved action incompatible with existing legislation or practice.

[34] The existence of the Bank will also make possible foreign loans for worth-while socio-economic projects which, while indirectly raising the over-all productivity of the borrowing country, would otherwise have been unattractive to private investors because they yield no direct monetary returns.

[35] The Bank's debentures and its guarantee will not, of course, be completely riskless, since their soundness will depend ultimately upon the Bank's ability to call in the 80% of the members' subscriptions held as a surety fund in meeting payments on guaranteed issues which have defaulted or on its own obligations.

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Bank will be the sound loan practices which it must pursue. Among other things, every loan made or guaranteed by the Bank must be examined beforehand and recommended by a competent committee; loans must, except in special circumstances, be for the purpose of specific projects of reconstruction and development; the Bank must make arrangements to ensure that loan proceeds are used only for the purposes for which the loans were granted; the rate of interest and other charges must be reasonable and, along with the amortization schedule, appropriate to the project; the Bank must pay due regard to the prospects of the borrower's ability to meet his obligations; and, in general, loan proceeds must be used exclusively for financing foreign (as compared with domestic) purchases connected with the project. In addition, a sensible element of flexibility is introduced with regard to the servicing of loans made by the Bank in that, if a member suffers from an "acute exchange stringency" which makes difficult or impossible payment of service on such loans, the Bank may accept payment in the member's own currency for a period of up to three years, and may modify the terms of amortization or extend the life of the loans,[36] thereby forestalling the stigma or possibility of defaults.

While careful loan practices will contribute greatly to raising the underlying quality of the foreign investments made by or through the Bank, there is always the possibility, of course, of unsound loans, not guaranteed by the Bank, being floated through private channels (if, and to the degree that, the market for such loans revives). In general, however, this danger does not appear probable. Not only are governments in the lending countries likely, as protection to their investors, to exercise careful supervision over such lending in order to avoid a recurrence of the excesses of the past, but also, apart possibly from the United States, to maintain close control over the new issue market so as to veto any foreign loans deemed unsound or otherwise objectionable for economic or political reasons. The Bank, moreover, if only from the viewpoint of protecting its own loans or guaranteed issues, is also likely to keep close watch over loans not executed through its facilities, and to put pressure on underwriting houses to avoid the flotation of any issues which the Bank considers risky. It should also be noted that since the Bank undertakes to extend or guarantee foreign loans that cannot be floated privately "under conditions which in the opinion of the Bank are reasonable for the borrower," loans sold without such a guarantee will tend to bear rates of interest and repayment terms no less favorable than those made by or through the Bank.[37]

[36] Such arrangements are not specifically provided for, however, with respect to foreign loans guaranteed by the Bank.

[37] None of the foregoing comments relate, of course, to direct investments. The problem of control in this case, while having many interesting aspects, cannot be discussed here.

Perhaps the most important long-run aspect of the problem of controlling international investment is that of preventing disturbing fluctuations, especially periodic sharp declines, in its volume. Over the interwar period foreign investment as a whole tended to move positively rather than inversely with the cycle, thereby intensifying rather than moderating world business fluctuations. Year-to-year changes on a moderate scale in the volume of foreign investment need not be serious (and may indeed be unavoidable) when the aggregate level of such investment remains high, but drastic declines, such as occurred in 1929–30, could have widespread deleterious effects on the world economy and can hardly be countenanced in the future. It is essential, then, that foreign investment be maintained at a high and reasonably stable level. To achieve this objective it will be necessary, in effect, if sharp business fluctuations continue in the future, to manipulate foreign investment deliberately in a countercyclical fashion. Thus, at a time of declining world employment and income, authorities in the chief capital-exporting countries could launch upon an aggressive program of investment abroad and thereby mitigate the deflationary forces at work. Such investment would increase outlay in the capital-importing countries and exports from the investing countries, and stimulate income on both sides. This, in turn, would have indirect stimulating effects on countries not immediately involved. Similarly, when world economic conditions were booming, the volume of foreign investment could be dampened down so as to check undesirable inflationary tendencies. Countercyclical action of this sort need not necessarily involve a *higher* volume of foreign investment in depression than in prosperity, but might simply be designed to smooth out its flow over the course of the cycle.

It is not likely, however, that the Bank, per se, can be an altogether satisfactory countercyclical agency, given its present structural setup. In boom periods, of course, the Bank could easily keep down the rate of aggregate foreign lending simply by restricting its direct loans abroad or its guarantees of loans, but in depression the Bank may find it very difficult to keep up the volume of its lending and guaranteeing activities. This stems from the fact that in its existing form the Bank must essentially play a passive role, the initiative in its operations lying ultimately with the borrowers. Thus, at a time of declining world income, there will be a tendency for foreign lending to fall off. To the degree that this reflects the unwillingness or inability of private investors to lend abroad, the existence of the Bank would, it is true, make possible foreign lending that would not otherwise occur.[38] On the other hand, to

[38] It appears likely that at a time of general depression the Bank will have to rely relatively more upon funds at its own disposal in making loans rather than upon funds obtained by the sale of its debentures (for which the market might not be very receptive).

the extent that borrowers, both governmental and corporate, are more reluctant to borrow abroad in time of depression than prosperity, the Bank's effectiveness will be limited. The Bank could, of course, attempt to entice prospective borrowers by the offer of loans on unusually generous interest and repayment terms, and might take a more active role by trying to induce governments in borrowing countries to engage in ambitious public works and developmental programs financed with its aid, and by even planning long-range programs beforehand with the governments concerned. These measures would be ineffective, however, as long as the latter continued to be reluctant to expand their investment outlays on the scale required. For the Bank, per se, to act as a genuinely effective countercyclical agency, then, it would seem desirable to equip it with the power, when aggregate foreign investment threatens to drop sharply, to carry out developmental projects itself in various parts of the world, either directly or through special international public corporations that might be set up. In this way, the Bank could, if necessary, organize and initiate its own projects when depression threatens (a "shelf" of such projects might be prepared beforehand) and would not necessarily have to wait for, or cajole, borrowers to come to it.[39] Otherwise, reasonable stability of international investment over time may have to await the development of more broadly conceived internationally co-ordinated public works and antidepression programs designed to stabilize world income and employment at high levels. Within such a framework foreign investment would, it is true, be one of the variables requiring official manipulation, but the need for, and extent of, such manipulation would be greatly reduced.

[39] The original Bank plan (November, 1943) had envisaged operations of this sort on a limited scale by providing that the Bank could participate in equity investments, but not to a degree exceeding 10% of its paid-in capital.

DISCUSSION

RAYMOND F. MIKESELL: From the discussions of both Mr. Hinshaw and Mr. Lary, it is clear that we cannot rely on foreign investment to provide a major portion or even a substantial percentage of our total investment requirements. Back in the eighties when Great Britain was investing abroad in excess of 300 million dollars annually, foreign investments provided an outlet for a substantial portion of the savings of the British people out of a national income of 5 or 6 billions. But with a total investment requirement for the United States of perhaps 30 billions the magnitudes are so large that a level of foreign investment of half or even one-third of this amount would be unthinkable. Nevertheless, if, as Mr. Lary suggests, foreign investments during the next decade could provide an outlet for as much as 12 per cent of our savings, the amount would not be insignificant.

Too much reliance should not be put on any particular kind of investment, foreign or domestic, to provide a sustained outlet for our savings. It would be just as absurd to count on the construction industry or the capital equipment industry by themselves to provide an outlet for the 20 billion dollars annually of investible funds, to use Mr. Hinshaw's figure, as it would be to count on foreign investment to absorb this amount. In fact, we would run into many of the same difficulties in looking to any particular type of investment outlet for amounts of this magnitude, which Mr. Hinshaw envisages for a program of foreign investment of this size.

In determining an appropriate foreign investment policy for the United States, consideration must be given not only to the impact of the investments and their repayment upon the savings-investment relationship, but also to certain special benefits to be derived from foreign investment. At the present time we are considering loans urgently needed for the reconstruction of war-torn areas, loans to supply essential imports for our Allies during the transition period, and loans necessary for the restoration of the multilateral character of world trade. Generally speaking, the political and economic benefits from such loans are so great that relatively little account can be taken of their effects on the domestic economy except for short-run effects, such as the inflationary impact of the additional expenditures financed by the loans. As Mr. Lary has pointed out, the net addition to total demand resulting from such loans during the next year or so is likely to be small, but it will be necessary to rely on domestic economic and export controls to prevent undue pressure on items in scarce supply. Consideration of the long-term effects of the repayment of loans of this category is not likely to be decisive, but they must certainly be taken into account in decisions regarding our over-all foreign investment program.

There is a second category of investments of a less urgent character, but which are, nevertheless, of great importance for international stability and the promotion of high levels of world trade. An example of this category might be a loan for a Yangtse or a Danube River project upon which the economic development of a particular area might depend. Serious consideration must be given to the transfer problem in making loans of this type

since the ability of the borrowing country to service such loans will have an important bearing on the stability and growth of world trade. Loans of this character are often made by or with the aid of governmental institutions and it may be found desirable to make special provision for flexibility in the making of service payments on such loans. It is also important that loans of this character have long maturities and that they bear a low rate of interest. The risks involved in making such loans together with any consideration of their impact on the domestic economy will need to be weighed against the economic and political gains from an expanded world trade and increased world prosperity which may be expected from loans of this character.

Finally, there are foreign loans and direct investments undertaken by private enterprise for profit with no special international significance. Loans of this type may be made with or without the encouragement of governmental institutions. It is to this category of loans that a country must look for a sustained outflow of capital over a period of time and with respect to which a consideration of the impact of foreign lending on the domestic economy is of primary importance.

I want now to consider the question of how a given amount of foreign investment differs from the same amount of domestic investment as an offset to savings. Mr. Hinshaw has shown what levels of gross foreign investment would be required to maintain an annual export surplus of 1 billion dollars at various rates of interest and for various periods of time. In order to maintain an export surplus of 1 billion dollars per year which would result from an initial foreign investment of 1 billion at 4 per cent interest, gross foreign investment at the end of twenty-five years would have to be at an annual rate of 5.9 billions. If, however, we were to assume that the recipients of interest and amortization from a series of domestic investments never spent any of the proceeds, a similar volume of gross domestic investment would be necessary at the end of the twenty-fifth year to maintain the same offset to savings provided by an initial investment of 1 billion dollars. If, on the other hand, the recipients of interest and amortization from both the domestic and the foreign investments spent all of the proceeds in the domestic market, the 1 billion dollar offset to savings could be maintained by an annual investment of 1 billion dollars in each case. To the extent that the recipients of interest and amortization payments from foreign investments use the proceeds to purchase consumers goods or real capital assets in the domestic market, the increased imports (or reduced exports) required to transfer these amounts will be offset by the additional domestic purchases. If the recipients of income from foreign investments have the same propensity to consume as the recipients of interest and amortization from domestic investments, the annual volume of gross investment required to maintain a given initial offset to savings is the same in both cases.[1]

Apart from the transfer problem, the problem of maintaining a given

[1] The annual volume of gross investment required to maintain a given annual offset to savings in the two types of investment will not be the same if one type of investment involves a higher proportion of direct investments. This will, of course, be partially offset by the higher returns on direct investments.

level of offset to savings from foreign investment is identical with that of maintaining the same amount of offset from any particular type of domestic investment. We know that we will have heavy investment in residential construction during the next few years, but that it will eventually taper off. Because of urgent foreign demands in the immediate postwar period foreign investments will be heavy during the next few years and then level off. But we cannot restrict housing construction or any other type of desirable investment because its net contribution as an offset to savings will eventually fall off. We cannot solve the problem of employment fifteen or twenty years from now. We will need to have other investment outlets in the future to take the place of those which will decline.

Foreign investment must be considered as a part of our entire investment program. Our primary concern today must be with the proper level of aggregate investment which is consistent with full employment and general economic stability. Provided there are profitable outlets for foreign investment and such investment is economically desirable, we should not shut off that investment simply because we may not be able to sustain the particular level of offsets to savings which the initial investment provides. Restricting foreign investment or any particular type of domestic investment will not avoid cyclical fluctuations. Such practices are likely to put a ceiling on total investment at a level less than that needed to maintain full employment.

The difference between foreign and domestic investment is to be found not in the savings-investment relationship (leaving aside the question of different multipliers for the two types of investment) but in the transfer problem. Borrowing countries must either increase their exports or reduce their imports when amortization and interest payments begin to exceed new borrowings from abroad. Sudden shifts in the volume of foreign investment by a great industrial country like the United States may create balances of payments difficulties, but so long as we maintain a high level of income and employment these difficulties are not likely to be insurmountable. With the aid of the International Monetary Fund and perhaps an appropriate use of direct controls it should be possible for countries to make an adjustment to shifts in their trade balance occasioned by changes in the volume of capital inflow.

Turning to the question of our long-term foreign investment program, I think Mr. Lary's analysis is quite reasonable. Although foreign investments can never account for more than a small percentage of our total investments, I see no reason why a more or less constant proportion of our total investable funds might not continue to go abroad. Provided we have a peaceful world and provided there is a steady increase in world income, we should be able to have a secular increase in the volume of our foreign investments at a rate approximating the rate of increase in our national income for the next fifty years. This would put off the problem of dealing with an import surplus attributable to an excess of receipts from foreign investments over new investments for many years to come, and meanwhile substantial changes will undoubtedly occur in our need for imports,

our tourist and other service expenditures, and in the distribution of our national income between consumption and savings. But to base our foreign investment policy on the question of whether or not we will be able to adjust to an import surplus fifty or a hundred years from now is no more appropriate than basing our housing policy on the stability of investment in the construction industry fifty years from now.

JACQUES J. POLAK: By far the most difficult problem which international investment presents at the present time revolves around the peculiar pattern which the balance of payments of creditor countries will have to follow in the next twenty-five years. In the near future—the next five or ten years—these countries will have a very substantial export surplus of commodities, and will make foreign investments to cover this export surplus. In the more distant future, their balance of payments will have to be reversed, to a position where there will probably be no substantial net export of capital, and where the other items of the balance of payments will have to accommodate themselves to a substantial inflow of interest payments. On the side of the debtor countries, the balance of payments will have to follow the obverse pattern; but the difficulties arising on their side appear at the present time to be less formidable. In the near future there is no doubt about the capacity of these countries to absorb large amounts of foreign capital; and in the more distant future, it would not seem impossible for them to transfer the service on this capital, provided a reasonable lending policy is being followed and total world income is kept at a high level.

Despite the additional strain which it will put on the supply of certain commodities, it appears to be generally agreed that substantial capital export from the main creditor countries will be possible in the course of the next five years. This applies not only to the United States, but also to such creditor countries as Canada, Switzerland, and Sweden, all of which are lending abroad on a substantial scale at the present time. It would also seem that an export surplus which, though large in absolute amount, would be small in comparison to the budget deficit maintained during the preceding war years, would not have unmanageable inflationary effects.

It is possible then to have large capital export from the creditor countries in the next half decade without serious harmful effects on their economies. But—and this element appears not to have received adequate stress—it is not sufficient that such substantial foreign investment should take place some time during the period 1946–50. The question of timing has to be defined much more sharply than that. Since the liberation of many countries in the course of 1945, large funds have been used for relief—first by liberating armies and then by UNRRA and by some of the liberated countries themselves by drawing down their foreign exchange holdings and by borrowing. Now, relief is only a stop-gap method. It cannot and should not last but for a relatively short period of time. UNRRA, under the Resolutions which presently govern its activities, is to terminate in Europe by the end of 1946, and in the Far East three months later. To ensure that at the end of the relief period, when the funds of UNRRA will be exhausted, the liber-

ated countries themselves will be able to have a reasonable level of exports from which to finance current imports, it is imperative that reconstruction lending should start well before that date. The maximum of foreign investment by the countries which are in a position to make such investments should therefore be concentrated as early in 1946 as is at all possible.

Two difficulties are generally foreseen to the required reversal of the balance of payments of creditor countries, some ten or twenty years from now: (a) it is felt that creditor countries cannot let a situation arise where they would have no net capital outflow, because such a situation would spell unemployment and deflation in the creditor countries; (b) even if the creditor countries were willing to have a balance of payment without a net capital outflow, there is no clear indication by what mechanism such a balance of payment position would come about. It is the contribution of Mr. Lary's paper that it points to a solution of both problems. With respect to the first problem, his solution is given only implicitly; namely, that adequate domestic investment rather than foreign investment must in the long run be relied upon to keep full employment in the creditor countries, if the transfer problem arising from international loans is going to be manageable at all. According to Mr. Lary, we should proceed on the assumption that this will be done, and that the increase of the population joint with the increase of productivity per head will lead to an increasing level of real income in the creditor countries. This will then at the same time provide a solution to (b), since the increased level of real income will induce a sufficient increase of imports to enable these countries to absorb a very substantial debt service.

It is reasonable to work on the assumption that the main assistance to the transfer problem will come in this way. Yet it is clear that this secular process will at any rate require guidance and channelling by deliberate balance of payments policies, both on the national plan and on the international plan. The following policies may be mentioned here: (1) As Mr. Bloomfield points out, the movement of short-term capital will have to be kept under control to prevent erratic and disequilibrating short-term capital movements from upsetting the broad secular pattern of capital movement. (2) Flexibility of debt service will have to provide a solution for temporary balance of payments disturbances. (3) The "scarce currency" provision of the International Monetary Fund will be of very great assistance in focusing any necessary adjustments in one particular direction rather than inducing a general deflationary movement if one particular currency becomes scarce.

Somewhat more attention should be paid here to a fourth policy factor on which rather much reliance is being placed recently; namely, the qualitative control of foreign investment. Examples of this control are given in Mr. Bloomfield's paper: every loan made or guaranteed by the Bank for Reconstruction and Development must be recommended by a competent committee; loans will usually only be made for the purpose of specific projects; the Bank must make arrangements to ensure that loans are used only for the purposes for which they were granted; loan proceeds must be used exclusively for financing those parts of approved projects which require

foreign exchange outlay. This qualitative control has been induced, no doubt, by the experience of certain outstandingly unsound loans which were made during the twenties. No one will question that such control is in itself beneficial. What should be borne in mind, however, is that these controls are not in themselves sufficient to ensure a reasonable debt service. The sum total of a large number of individual "sound" loans does not add up to a wise lending policy. A wise lending policy will require that the general conditions, both in the borrowing and in the lending countries, are such that a flow of interest payments and amortization will be possible. This will require, in addition to the necessary scrutiny of individual loans, broad international planning, not only of foreign investment, but at the same time of foreign trade and of the operations of the International Monetary Fund. An extremely useful implement for this purpose would be, in my view, a joint unit of the various international agencies concerned with balances of payments, which would analyze the entire flow of international transactions and make co-ordinated recommendations to the various special agencies. Such analyses would contribute to raising each of the individual specialized agencies above the technical considerations applying to its own field, and would make it possible to create conditions under which each of these agencies might successfully perform the functions assigned to it in its own field. In the particular field of international investment, it would greatly contribute to establishing conditions for "sound" international lending in the broad sense of the word.

JOHN PARKE YOUNG: The three papers that have been presented are on a high level and contain little with which I would disagree. The comments that have already been made on these papers indicate general concurrence. While it is agreed that the foreign investment of American capital is in general to be welcomed, little has been said about just how foreign investment is to take place or the machinery by which such investment is to be accomplished. Are we to rely on government lending, or on such private lending as can take place with the protection of guarantees by the newly created international Bank, or can the private capital market be revived so that it can proceed under its own momentum? Another question that has not been discussed has to do with the extent and nature of government controls over private foreign investment, in the event that private investment takes place.

The reasons for a lack of private investment at the present time have to do especially with the political uncertainties of recent years and the trend to the left throughout the world generally. As a result of these conditions capital is timid to seek investment abroad. Another factor which discourages foreign investment is the restrictions that exist on the transfer of funds. Exchange controls are in force in most countries and have interfered with the free transfer of earnings on investment as well as with such return of principle as may be desired. A further deterrent to investment has been the fluctuations in exchange rates and the uncertainty regarding the continuance of current rates. This third difficulty, however, is perhaps less

important than the others since most foreign loans made by the United States are in terms of dollars; and furthermore depreciation of a country's exchange rates does not necessarily mean an increased burden to the country as a whole with respect to its foreign debt payments since its exports may yield the same or more foreign exchange. Exchange fluctuations may in some cases increase the burden on the debtor, but the barrier to foreign lending in the past has been reluctance of the lender more than of the borrower. Direct investments are ordinarily not hampered by exchange fluctuations as much as they are by exchange restrictions. Prices and costs and exchange rates tend sooner or later to become adjusted; so that exchange depreciation is usually accompanied eventually by an increase in prices and money earnings.

The difficulty which Mr. Hinshaw points out, and with which I concur, that the accumulation of interest and amortization payments tends to reduce the net stimulus to employment from a given annual volume of capital export, is not a matter of currency, exchange, or the balance of payments; nor is it peculiar to foreign investment as contrasted to domestic investment. If large dollar investments were made in Alaska, for example, repayments and interest might not involve a transfer problem but would have the same effects on United States employment as though the transfer were from pesos or some other currency to dollars. If the investment were entirely within the domestic economy the same situation would exist.

In other words, chronic unemployment cannot be solved by foreign investment nor can it be solved by domestic investment unless demand keeps pace with production. Employment must be maintained by current demand (including that for producers goods) being approximately equal to current output.

Foreign investment is desirable for the same reasons as domestic investment, and we should think of foreign investment as a part of total investment, domestic and foreign. This does not mean, however, that there are not special problems and special advantages related to foreign investment.

INTERNATIONAL CARTELS

THE RELATION BETWEEN CARTEL POLICY AND COMMODITY AGREEMENT POLICY

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The relation between cartel policy and commodity agreement policy has in the past been a problem for each individual government to solve for itself. The "Proposals for Consideration by an International Conference on Trade and Employment," announced by the Secretary of State on December 6, 1945, however, raise the question of the relation between these two policies to the international level, since they include the proposal that there should be international agreement with regard to a proposed policy towards restrictive business practices in international trade (such as those of cartels) and with regard to a proposed policy toward intergovernmental commodity agreements. Since these proposals represent at one and the same time a formulation of the policy of the Executive branch of the United States Government, and a program for international collaboration with respect to cartels and commodity agreements, they may appropriately be used as the point of departure for the present discussion.

The "Proposals for Consideration by an International Conference on Trade and Employment" are the outcome of several years of coordinated effort by economists and others within the various departments of the Executive branch of the United States Government. It is likely also that British experts have had an opportunity to contribute suggestions with regard to the Proposals, since considerable attention was of necessity devoted to questions of commercial policy during the Anglo-American discussions in Washington of September to December, 1945, and since the government of the United Kingdom announced that it was "in full agreement on all important points in these proposals" at the same time that the Secretary of State announced that the Proposals had the endorsement of the Executive branch of the United States Government.[1]

In order to implement the co-operative economic measures with respect to trade and employment included in the Proposals, it is recommended that there be created an International Trade Organization of the United Nations. In addition to many other duties, this Organization

[1] U. S. Department of State, Press Release of December 6, 1945, "Joint Statement by the United States and the United Kingdom Regarding the Understanding Reached on Commercial Policy."

would be charged with the furtherance of a policy of curbing restrictive business practices in international trade:

> There should be individual and concerted efforts by members of the Organization to curb those restrictive business practices in international trade (such as combinations or agreements to fix prices and terms of sale, divide markets or territories, limit production or exports, suppress technology or invention, exclude enterprises from particular fields, or boycott or discriminate against particular firms) which have the effect of frustrating the objectives of the Organization to promote expansion of production and trade, equal access to markets and raw materials, and the maintenance in all countries of high levels of employment and real income.[2]

The proposed policy of international collaboration in curbing the restrictive practices of international private business cartels is an essential part of the general program for removing the restrictions which have hampered the growth of international trade which is the main objective of the proposed International Trade Organization.

The proposed policy with regard to intergovernmental commodity agreements that are likely to result in restrictions of international trade in particular commodities, on the other hand, is one of cautious tolerance. Provided that the members of the International Trade Organization undertake to adhere to specified rules to govern the institution and operation of intergovernmental commodity agreements, restrictive trade practices under such agreements are to be countenanced.

This somewhat more liberal policy towards the restrictive practices of intergovernmental commodity agreements than towards those of private arrangements is to be explained by the expectation that there will be a limited range of commodity problems, involving almost exclusively foodstuffs and raw materials, which will call for special attention in the postwar period. The argument is as follows: Although the maintenance of high levels of income and employment generally will help in reducing the number of such special problems, it will not solve all of them. With regard to the remainder, after all possible has been done to increase the consumption of the commodities in question, it still may be necessary to impose restrictions (by intergovernmental agreement) on production or exports, to fix prices, or to allocate shares of markets among the producing countries. Otherwise, "these difficulties, if serious, may have such widespread repercussions as to prejudice the prospect of the general policy of economic expansion."[3]

[2] U. S. Department of State, "Proposals for Expansion of World Trade and Employment," Nov., 1945, p. 19 (hereafter referred to as Proposals). It is of some interest that this statement of policy appears to call for a somewhat less vigorous attack upon restrictive cartel practices than that advocated in statements of State Department officials made before the discussions with the British. Compare, for example, the statement of W. L. Clayton that "we plan to propose to the nations of the world an international agreement to banish the restrictive practices of international cartels." *The Department of State Bulletin*, XII (1945), 937.

[3] Proposals, p. 20. The merits of the argument that there will be a few primary products in burdensome surplus supply in the postwar period for which restrictive commodity arrangements will be unavoidable if even worse restrictive trade practices are to be avoided cannot be considered here. Certainly, even one skeptical of the validity of the argument must recognize that we probably will have some intergovernmental commodity agreements in the postwar

It must be admitted, however, that a policy of tolerance of restrictive trade practices under intergovernmental commodity agreements might seriously weaken the proposed policy of curbing private international restrictive arrangements. Is it not possible that an intergovernmental commodity agreement designed to facilitate readjustment of the conditions of production in a sick primary industry may turn out to have many of the undesirable characteristics attributed to a private cartel arrangement: the protecting of high-cost producers, the raising of prices above the levels necessary for reasonable long-run prosperity in the industry, and the seeking of maximum profits for the producers without regard for the interests of consuming countries? Does the fact that an international commodity agreement has as its participants governments rather than private concerns necessarily insure the protection of the public interest? Is it not possible that the proposed policy of curbing restrictive international business arrangements might be circumvented by the governments of nations which only mildly support this policy, the nations in question making use of the device of an intergovernmental commodity agreement as a screen for what would be essentially a private cartel in every respect but name?

The history of intergovernmental commodity agreements in the interwar period shows clearly that the participation of governments in such agreements is no guarantee that prices will not be raised unreasonably, that an umbrella will not be held over high-cost producers, and that the interests of consuming countries will not be given scant attention. The representatives of the governments, whether selected from the industry concerned or not, tend in time to reflect the interests and point of view of the industry. Furthermore, when the industry is an important one in the economy of a nation (which is likely to be the case when an international commodity arrangement is involved) the industry is likely to exert considerable pressure on the government to appoint as its representatives persons in whom the industry has the utmost confidence, and to instruct these representatives with special regard for the interests of the industry.[4]

It is not at all unlikely that, even in the absence of a policy of curbing international restrictive business arrangements, the protagonists of such arrangements would increasingly seek alliances with their respective governments in the postwar period, and the distinction between international private cartel arrangements and intergovernmental commodity agreements would in any event tend to disappear.[5] Even more likely is

period, and if this is to be the case it is highly desirable that we should have a clear understanding with other nations as to the conditions to which such agreements should be subject.

[4] Cf. J. D. Black and S. S. Tsou, "International Commodity Arrangements," *Quarterly Journal of Economics*, XVIII (1943–44), 544.

[5] Cf. E. S. Mason, "The Future of International Cartels," *Foreign Affairs*, XXII (1943–44), 605–606.

this to occur if an intergovernmental policy of curbing the private arrangements is adopted.

Probably it is in recognition of these dangers that the Proposals suggest that members of the International Trade Organization should undertake to adhere to specified rules to govern the institution and operation of intergovernmental commodity agreements. These rules should be appraised as to whether, if observed by the member governments, they would prevent such agreements from being subject to the abuses to which it is quite generally agreed they have been subject in the past, whether they would prevent such agreements from being used, in effect, to circumvent the proposed policy of curbing cartels, and, finally, whether the rules are practical.[6]

The rules in question may, for the purpose of the present analysis, be divided into three groups: first, there are rules to govern the procedure leading up to the creation of an intergovernmental commodity agreement; second, there are rules to govern operations under the agreement, once it is established; and, third, there are some miscellaneous rules with respect to renewal of agreements, publicity, and other matters. It is proposed to consider the rules in this order, with particular attention to the first two groups of rules.

1. *Rules to Govern the Creation of Agreements*. The steps involved in bringing an agreement into being are: (1) members interested in the production or consumption of a particular commodity with respect to which they believe "special difficulties" exist or are likely to arise may ask that a special study be made of that commodity; (2) if the organization believes the situation calls for such a study, it will then establish a study group for that purpose; (3) the study group then makes a study of the "root causes of the problem"; and (4) if the study group comes to the conclusion that available measures for increasing consumption will not "operate quickly enough to prevent excess supplies" from accumulating, an intergovernmental conference for the negotiation of a commodity agreement may be requested.[7]

The rules governing the procedure for instituting a commodity agreement provide, first, that any members having an interest in the production or consumption of the commodity in question may participate in consideration of the proposed agreement.[8] This rule is obviously designed to prevent the procedure outlined above from being dominated

[6] It should be noted that these rules are not designed to cover "international agreements relating to the protection of public morals; the protection of human, animal, or plant life or health; the conservation of reserves of exhaustible natural resources; the control of international monopoly situations; or the equitable distribution of commodities in short supply." Proposals, p. 23. It is provided, however, that such agreements should not be used for ends inconsistent with the objectives of cartel and commodity agreement policy. *Loc. cit.*

[7] Proposals, p. 20.

[8] *Ibid.*, p. 21.

by producer countries to the exclusion of consumer countries, or perhaps by some producer countries to the exclusion of others. The rule is obviously desirable and practical.

The second rule provides three conditions which must be fulfilled before member countries may undertake an intergovernmental commodity agreement involving limitation of production or exports or allocation of markets. One of these conditions has already been mentioned: the study group must have made its investigation of the root causes of the problem. The second condition is an extremely important one: a determination must have been made, in accordance with procedures approved by the organization, either:

a) that a burdensome surplus of the product concerned has developed or is developing in international trade and is accompanied by widespread distress to small producers accounting for a substantial proportion of the total output and that these conditions cannot be corrected by the normal play of competitive forces because, in the case of the product concerned, a substantial reduction of price leads neither to a significant increase in consumption nor to a significant decrease in production; or

b) that widespread unemployment, unrelated to general business conditions, has developed or is developing in respect of the industry concerned and that such unemployment cannot be corrected by the normal play of competitive forces rapidly enough to prevent widespread and undue hardship to workers because, in the case of the industry concerned, (i) a substantial reduction of price does not lead to a significant increase in consumption but leads, instead, to the reduction of employment, and (ii) the resulting unemployment cannot be remedied by normal processes of reallocation.[9]

This second condition provides two alternative sets of requirements with regard to the conditions of production and demand for a commodity, one or the other of which must be fulfilled if restrictive measures are to be employed under an intergovernmental commodity agreement. The first set of requirements, stressing "burdensome surplus," a substantial proportion of output coming from small producers, inelastic demand and inelastic supply, appear intended to apply particularly to agricultural products, such as wheat, sugar, and raw rubber. The second set of requirements, stressing unemployment, inelastic demand, elastic supply, and lack of alternative opportunities for labor, appear intended to apply to certain minerals and, possibly, to semiprocessed goods. They could be satisfied by certain finished goods; but a specific reference to manufactured goods is contained in a later rule which serves to limit this one.

Both sets of requirements are designed to admit of the necessity, even desirability, of restrictive measures under intergovernmental auspices, to forestall unilateral action by some countries to the disadvantage of other countries, and to alleviate serious economic problems in cases in which alternative employment opportunities are absent.[10] Consider first the case in which a burdensome surplus of a product has developed or

[9] *Ibid.*, p. 21.

[10] See statement of the objectives of intergovernmental commodity agreements, Proposals, p. 20. It should be noted that the emphasis throughout is upon the abnormal commodity problems expected to result from the war that will call for special treatment, rather than upon

is developing. Although the term "burdensome surplus" is not defined in the Proposals, the rest of the paragraph in which the term occurs (*supra*) gives a good indication of the meaning attached to it. Those who framed the Proposals clearly had in mind the situation in which supply is very slow to adjust itself to a decrease in demand—because of the predominance of small enterprises, the relatively small proportion of total unit cost made up of prime cost involving actual outlays of money, the similarly low marginal money outlay cost, the limited choice of alternative products, and the fact that the farmer and his family are tied to their land by sentimental and other attachments. No *visible* burdensome surplus may actually materialize so long as the competitive forces of the market are unimpeded and the full output is sold for what it will bring. However, if price remains at a low level for several seasons, and there nevertheless is no clear tendency for the supply to decrease, the producers of the commodity are likely to seek relief through government, and the outcome is likely to be some form of unilateral restriction scheme which will bring into visible form the burdensome surplus which in an abstract way must have been overhanging the market all the time.

The criteria provided for the application of this first set of requirements are reasonably clear and feasible of application. There are three cautions, however, which should be kept in mind. First, the organization should not be too impatient in determining whether a burdensome surplus has developed or is developing. There should be relatively few cases that will satisfy this set of requirements. There may be some temptation to assume that a low price for an important staple agricultural product is likely to remain low for a long period, and accordingly to make a premature finding that a burdensome surplus exists and therefore an intergovernmental commodity agreement is required.

Second, there is on the other hand the danger that the wording of this requirement might be interpreted to preclude an intergovernmental commodity agreement until "widespread distress to small producers accounting for a substantial proportion of the total output" has actually developed. If, for example, this requirement were to be interpreted strictly it might bar an intergovernmental agreement with respect to wool at the present time on the basis that the price has *to date* been held at a sufficiently high level to prevent the appearance of "widespread distress." Yet an agreement with respect to wool is probably one of the proposed agreements which would generally be regarded as desirable under present circumstances.

Third, there will be a temptation to conclude that, because there

the desirability of stabilizing the prices of raw materials or the necessity of checking the decline of raw materials prices in periods of general depression through the use of restrictive measures under intergovernmental commodity agreements.

exists a domestic program of relief or price support for a commodity in one or more countries, there must exist a burdensome surplus of the commodity. The conclusion is not a safe one, however, since, as we know from experience in this country, the institution of such a program of assistance may result from political pressures within the country directed to the improvement of the condition of a particular group of producers, and may not arise from the existence of abnormally low prices at all. The real problem may, in fact, be that of an abnormally high price which will have to be reduced; and this is likely to be a matter involving domestic policy rather than an international agreement.

Closely related is the temptation to conclude that, because one or more countries have adopted unilateral measures (such as an export subsidy) in order to maintain some arbitrarily determined share of the world market for the commodity, an intergovernmental commodity agreement apportioning the world market between all producing countries is the only way of avoiding economic warfare.[11] The Proposals do not say that the *existence* of unilateral policies employed by some countries to the disadvantage of others may be taken as an indication of the existence of a burdensome surplus of the commodity to which the unilateral measures apply. It is to be hoped that no subsequent interpretation of the Proposals will support such a view. Nations whose foreign economic policies offend other nations should account for their policies to the International Trade Organization or to the Social and Economic Council of the United Nations Organization, and they should be induced, if possible, to correct them. No nation should be encouraged to expect that, by the use of unilateral policies as a sort of club, other nations may be compelled to join with it in a restrictive intergovernmental commodity agreement.

Consider next the second set of alternative requirements—the case in which widespread unemployment has developed or is developing in one industry, the general business situation being in no way responsible for this special situation: if the supply is elastic and the demand inelastic, and if there are not alternative opportunities available for the unemployed labor so that there is likely to occur "widespread and undue hardship to workers," then an intergovernmental commodity agreement is, according to the Proposals, an admissible method of providing a

[11] The view that commodity agreements are the one solution for international situations produced by unilateral economic policies is based on the unfortunate assumption that no country (and least of all the United States) can be expected to change its domestic economic policy on the basis that this policy is a source of justifiable irritation to other countries while the same ends could be achieved in a way which would not be objectionable. In the case of our cotton and wheat subsidies, furthermore, there is even reason to fear that other countries may believe that the subsidies have been countenanced, in part, because they may serve as a rather forceful means of inducing other countries toj oin this country in intergovernmental wheat and cotton agreements.

period of transition while a solution for the underlying problem is put into effect.

As was suggested above, the purpose of this second set of requirements may be interpreted as intended to provide for agreements in the case of certain minerals, such as tin, copper, and possibly petroleum. Take tin, for example. The prewar intergovernmental tin agreement made it possible for Bolivia, a high-cost producer, to maintain a substantial share of the market for its product. If such an agreement were to be disallowed now, and if a private international restrictive arrangement were also to be barred with the effect that something like competition were to be established in the world market for tin, the price of tin would fall to a level that would make uneconomical much of the production of the Bolivian mines. The result would be unemployment and widespread hardship for the workers in these mines. Furthermore, since there are not many alternative opportunities for employment, this unemployment would probably persist. Hence this appears to be a case which fits the criteria included in the second set of limitations, and which accordingly would be eligible for an intergovernmental commodity agreement. Such an agreement, presumably, would continue a sufficiently high price so that the Bolivian tin mines might continue in production and supply a given quota of the world market while more fundamental measures are set on foot for a readjustment of the Bolivian economy so that eventually the agreement would no longer be necessary.

If it is correct to assume that this is the sort of situation the framers of these Proposals had in mind, there is much to be said for including this alternative set of criteria for the establishment of an intergovernmental commodity agreement. Certainly some provision needs to be made for handling cases like tin, in which the whole economy of a country may be seriously affected by a restoration of competition too suddenly and without a previously prepared and executed plan for the development of alternative employments for the labor involved.

There are, however, two questions to be raised with regard to the interpretation of this second set of requirements. It is, of course, important to note that the widespread unemployment, which is the primary basis for including this case, must be "unrelated to general business conditions." This is important, as it certainly is not desirable that restrictive intergovernmental commodity agreements should be employed as a sort of international NRA program to raise the prices of primary products in periods of depression. It is not clear, however, how widespread the unemployment must be. In the case of tin, for example, it is quite likely that a restoration of competition in this industry might result in a net increase of employment for the industry the world over, even though considerable unemployment did develop in the Bolivian

industry. Probably those who framed the Proposals meant by "widespread unemployment": widespread unemployment in respect of the industry concerned in one or more countries on a scale such as to affect seriously the whole economy of that country or those countries. It would, however, be desirable that this matter of interpretation should be clarified.

Another question is whether the widespread unemployment must be permitted to develop before action may be taken, or whether it might not be forecast with some assurance that it would take place in the absence of some action to the contrary, and a plan formulated and put into effect so as to ***prevent*** the widespread unemployment from developing.

To return now to the review of the rules governing the procedure for bringing an intergovernmental commodity agreement into being, it will be recalled that the second rule provides three conditions which must be fulfilled, the first two of which have now been discussed. The third condition is that there should first be:

> Formulation and adoption by members of a program of economic adjustment believed to be adequate to insure substantial progress toward solution of the problem within the time limits of the agreement.[12]

This condition is a highly desirable one. An intergovernmental commodity agreement which is not based on some fairly concrete plan, agreed to by the member nations, for solving the problem which occasioned the agreement is likely simply to perpetuate an uneconomic situation at the expense of consuming countries. The prewar intergovernmental commodity agreements were in general defective in this regard. In the case of the rubber agreement of 1934, it is true, new plantings were restricted with a view to reducing an alleged burdensome surplus, but at the same time high-cost production was protected at the expense of low-cost production.[13]

In some cases the program of economic adjustment will need to be concerned primarily with the gradual and orderly liquidation of excess stocks, as is perhaps the case with wool. In other cases, the program will need to include changes in the domestic policies of member countries —the removal of export subsidies, the reduction of tariffs, alterations in preferential arrangements, restriction of grower subsidies, for example. In some cases there will need to be a more elaborate plan calling for the gradual but permanent reduction of the output of the commodity in question by one or more sources of supply. In those cases in which the commodity is an important one in the economy of a high-cost producer country—and this is likely to be the typical case—a gradual re-

[12] Proposals, p. 22.
[13] P. L. Yates, *Commodity Control*, pp. 126–127.

duction in that country's export quota or production of the commodity will have to be accompanied by the development of alternative industries. In the case of less developed countries, there probably will be occasion for collaboration between the International Trade Organization and the International Bank for Reconstruction and Development in order that a feasible plan may be formulated and financed. In the case of other countries, capable of financing their own development, the principal problem will be that of inducing a change of domestic policy on the basis of its international desirability.

In this connection, note should be taken of the companion rule, applicable to the operation of intergovernmental commodity agreements, that increasing opportunities should be afforded "for satisfying world requirements from sources from which such requirements can be supplied most effectively."[14] This rule clearly indicates the nature of the plan of adjustment which those who framed the Proposals had in mind. During the lifetime of a restrictive commodity agreement, the necessary steps are to be taken for whatever readjustment of the conditions of production might be required to make the commodity agreement eventually unnecessary.

Admittedly this requirement will make it difficult to negotiate intergovernmental commodity agreements. No country is likely to welcome participation in an agreement involving a permanent reduction in its exports or production of a commodity important in its economy. Furthermore, in cases in which unwise domestic policies have been in part responsible for the development of a burdensome surplus situation, there will be the far from inconsequential difficulty of inducing the governments responsible to correct their domestic policies.[15] These difficulties are not insuperable, however, and certainly will never be overcome until they are squarely faced by governments. If efforts directed to the expansion of world incomes and employment should be even moderately successful, the occasions calling for restrictive intergovernmental commodity agreements will be relatively few, and the facility with which related adjustment plans will be accepted may be relatively great. In the absence of a fairly high general level of prosperity, however, there is less hope of obtaining adoption of plans for the correction of maladjustments of commodity production. Nevertheless, if it should be necessary to choose between a restrictive intergovernmental commodity agreement with no adjustment plan, and no restrictive intergovernmental commodity agreement at all, there does not now appear in prospect any

[14] Proposals, p. 22.

[15] It should be noted, however, that in some cases a correction of the domestic policy may obviate the necessity for the country sacrificing its former share of the export market for the commodity. This may be the case in the United States with respect to cotton.

commodity situation sufficiently serious, in this writer's opinion at least, to warrant acceptance of the former alternative.

It would, however, be unwise to interpret too strictly the provision that the program of adjustment should be believed adequate "to insure substantial progress toward solution of the problem within the time limits of the agreement." Some of the problems for which commodity agreements are likely to be proposed have their roots sunk deeply in the conditions resulting from World War I, and they have been aggravated by the policies of national self-sufficiency of the interwar period and the unwise national policies designed to deal with the depression of the thirties. In some cases the expectation of any progress at all toward a solution in a period of five years would be justification for permitting a trial of an intergovernmental commodity agreement. The important requirement is that there should be a plan for correcting the conditions of production, agreed to by the participating nations, and that this plan should include an agreed time schedule for putting it into effect.

The third rule governing the procedure of instituting an intergovernmental commodity agreement is:

> Intergovernmental agreements involving the limitation of production or exports or the allocation of markets in respect of fabricated products should not be resorted to unless the Organization finds that exceptional circumstances justify such action. Such agreements should be subject to the principles set forth in this Chapter, and, in addition, to any other requirements which the Organization may establish.[18]

The purpose of this rule is clear. If under the second rule intergovernmental commodity agreements had been permitted only in the case of burdensome surplus situations, this third rule would not be necessary, as it is highly unlikely that any fabricated commodity could meet the requirements of the first set of limitations. Since, however, a second set of limitations has been provided which, it is suggested, are primarily designed to provide for agreements in the case of certain minerals, and since this second set of limitations might admit fabricated articles as well, the Proposals include a third rule designed to exclude fabricated products in the absence of exceptional circumstances.

Although it is true that the close of the war finds many important manufacturing industries (particularly in the United States, Canada, and Great Britain) with excess capacity for peacetime production of war products, the hardship likely to result from this situation is not comparable with that likely to occur in the case of some of the primary products. Many of the plants are owned by the government; and in the case of privately-owned plants a high proportion of their value may have been written off during the war period. The principal problem is that of

[18] Proposals, p. 22.

the shifting of labor to peacetime industries for which the demand is high, and this is a problem for which, in the case of manufactures, the device of the intergovernmental commodity agreement appears neither necessary nor desirable.

It is principally in the case of manufactured products that there is some danger of the intergovernmental commodity agreement being used as a means of circumventing the proposed policy of curbing restrictive international business arrangements. Since there appear few if any cases in which the public interest would be served by restriction schemes with respect to manufactured products, this third rule appears to be justifiable on its merits, and in addition would provide some protection to the policy of curbing private cartel arrangements.

Those who have framed the Proposals have been wise, however, in leaving room for the treatment of exceptions to this rule. Such exceptions may arise in the case of fabricated products which are very close substitutes for primary products, as is the case with some of the synthetics. If for example it should turn out to be desirable to have an intergovernmental commodity agreement with regard to natural rubber, a burdensome surplus of which certainly is in prospect a few years from now if any large proportion of synthetic rubber production is maintained, it may prove desirable to include the synthetic product within the scope of the agreement. Similarly, an intergovernmental commodity agreement with regard to nitrates should probably include within its scope the synthetic as well as the natural product. It is doubtful, however, whether an intergovernmental commodity agreement with respect to cotton or wool should include the substitute synthetic fibers. Each case would have to be considered on its merits.

It may be concluded that the rules set down in the Proposals for governing the institution of intergovernmental commodity agreements do promise to limit very considerably the possible use of such agreements as a means of circumventing the policy of curbing restrictive cartel arrangements.

2. *Rules to Govern the Operation of Agreements*. There remain to be considered the rules set down in the Proposals for governing the operation of an intergovernmental commodity agreement once it has been brought into being.

There are four such rules, the first of which simply provides for the accession to the agreement of any member of the Organization "on terms not less favorable than those accorded to members parties thereto."[17] This is the counterpart of the first rule, mentioned earlier, governing the establishment of a commodity agreement. Both rules are designed to insure that all interested countries will have the opportunity

[17] Proposals, p. 22.

to participate in any control plan for a commodity of concern to them. The rules are therefore necessary. Unfortunately they do have the disadvantage that their application is likely to make control councils large and somewhat cumbersome.

The second rule to govern the operation of commodity agreements is a very important one:

> The members adhering to such agreements which are largely dependent for consumption on imports of the commodity involved should, in any determinations made relating to the regulation of prices, trade, stocks, or production, have together a voice equal to those largely interested in obtaining export markets for their production.[18]

It is to be hoped that the participation of consuming countries on a basis of equality with producing countries may serve to prevent a misuse of the power to regulate prices, trade, stocks, or production, and to avoid the abuses of this power of which some prewar intergovernmental commodity agreements were guilty.

There has been some past experience with consumer country representation, although in no case to the full extent required by this second rule. The International Rubber Regulation Committee and the International Tin Committee made use of advisory panels of consumer industry representatives from different consumer countries. It should be noted, however, that these representatives were not genuine representatives of consumers but of processors, and that they had no vote, although it is clear that they did exercise considerable influence of the right kind on the decisions of the Committees. In the case of the International Tea Agreement, which is not, however, strictly an intergovernmental agreement, the relatively satisfactory results obtained under the agreement are attributed in part to the fact that "the principal producers and consumers of tea are both British."[19] In the case of the Inter-American Coffee Agreement, the United States, the most important consumer country, has been a participant. Although for obvious reasons connected with the politics of the "good neighbor" policy a relatively high price ceiling for coffee was established in the United States in December, 1941, the operation of the quotas under the agreement was not permitted to force the United States to raise this price during the war period, although it is doubtful how much our membership in the agreement contributed to this outcome. Our membership probably did facilitate intergovernmental arrangements designed to avoid a short supply of coffee in this country, however, and thus served somewhat to protect consumer interests.

There are several difficulties which are revealed by this limited experience with consumer country participation in commodity agreements and which cannot help but temper somewhat the expectations of

[18] Proposals, p. 22.
[19] V. D. Wickizer, *Tea under International Regulation*, p. 121.

beneficial effects to be anticipated from the proposed rule with regard to consumer country participation. First, there is the fact that the government of a country "largely dependent for consumption on imports of the commodity" may nevertheless be significantly influenced by producer interests if nationals of the country have important financial interests in enterprises operating in producer countries (which are sometimes dependencies of consumer countries). For example, the United Kingdom and the Netherlands would qualify as consumer countries as participants in an intergovernmental rubber agreement, but if the history of the International Rubber Regulation Committee is to be taken as indicative, both of these countries would in fact exert their influence in behalf of the interests of producing countries at least as strongly as in behalf of the interests of consuming countries. It would follow that if producing and consuming countries were to be given equal votes, and if some consuming countries frequently if not regularly voted with the producing countries, the desired balance between the two groups of interests would be upset in favor of the countries favoring restriction.

It must be recognized, second, that even in a consuming country which does not have a financial interest, through its nationals, in the production of the primary product, the government's attitude towards policy under the agreement may nevertheless fail to represent the ultimate consumers' interest, but instead may be predominantly influenced by the interest of its processing industry. The reply might be made that, just as the ultimate consumer is interested in a low price for the finished goods, so the processor is interested in a low price for his raw material. The latter statement, however, is only partly true. To the processor the cost of his raw material is frequently a relatively small element in the total cost of his product, and he is likely to think of himself as able to pass on to the consumer, within limits, an increase in the price he has to pay for it. He is likely to be more concerned with the stability than with the height of the price of his raw material, since in such industries as the rubber goods industries he necessarily has considerable sums invested in inventory at any one time. Hence he particularly dislikes declines in the price of his raw material, and will be quite reconciled to paying a price somewhat higher than the competitive price might be, if in return he can count on stability of this price, particularly on the downward side.[20]

A third danger is that the consumer country representatives will in any event be relatively ineffective because of their inability to obtain reliable information as to the true conditions of production, costs, elasticity of supply, and other matters involved in judging the need for restriction. Certainly, there must be little hope that consumer representa-

[20] Cf. K. E. Knorr, *World Rubber and Its Regulation*, p. 174.

tion will be effective in tempering the excesses that have characterized past international commodity controls unless the International Trade Organization assumes the responsibility of conducting independent research with regard to conditions of production and provides the consumer country representatives as well as the producer country representatives with the fullest possible information upon the basis of which to formulate commodity policy.

Fourth, there is the danger that, if something like an equal balance is obtained between producer and consumer interests on the commodity control, there will repeatedly be deadlocks, with corresponding delays in arriving at decisions on questions of commodity policy. If these deadlocks and delays should occur frequently, it is quite possible that the commodity agreement would become ineffectual and finally break down entirely.

These admitted difficulties to be anticipated in the operation of commodity agreements with balanced producer-consumer country representation should not be taken, however, as a basis for abandoning this rule. The rule is a good one, and probably constitutes the best available safeguard against the possibility of intergovernmental commodity agreements developing the undesirable attributes of private cartel arrangements. The difficulties cited above are surely not insoluble, and in time international collaboration through the International Trade Organization will no doubt develop techniques for meeting them.

The third rule governing the operation of commodity agreements is:

> The agreements should, when necessary, contain provisions for assuring the availability of supplies adequate at all times for world consumption requirements at reasonable prices.[11]

This requirement clearly is not a requirement that every intergovernmental commodity agreement should include provision for a buffer stock plan. Nothing, in fact, is said in the Proposals about the desirability of stability of price; and this is rather surprising, since stability of price is frequently a prominent objective in the minds of proponents of commodity agreements. The omission of stability of price as an objective strengthens rather than weakens the Proposals, however, since it leaves the full emphasis upon the anticipated postwar problem of burdensome surplus and possible unemployment in those primary products industries which have been greatly stimulated by war demands.

The requirement that agreements should, when necessary, contain provisions for assuring adequate supplies for world consumption requirements at reasonable prices is designed to protect consumer countries from actual want or from abnormally high prices in the event of crop failures or badly mistaken demand forecasts by a commodity control committee. In effect, this requirement says: if a commodity control

[11] Proposals, p. 22.

committee has the power to restrict world production of a commodity, before it exercises this power it must accumulate sufficient reserves, or see to it that they are accumulated, so that if a bad harvest occurs, or if it makes a mistake and restricts production too much, consumer countries will not suffer seriously for the mistake. This requirement, like the preceding two, serves to protect consumers, and constitutes a further safeguard against the commodity agreement becoming a cartel-like restriction scheme.

The fourth rule for the operation of commodity agreements is:

> The agreements should, with due regard to the transitional need for preventing serious economic and social dislocation, make appropriate provision to afford increasing opportunities for satisfying world requirements from sources from which such requirements can be supplied most effectively.[22]

This rule has further reference to the adjustment plan, the requirement with respect to which was fully discussed earlier (*supra*).

3. *Miscellaneous Rules*. There are additional requirements, all of them designed to prevent the intergovernmental commodity agreement from operating contrary to the public interest: the initial term of an agreement to be limited to five years; renewal of an agreement to be subject to the same rules as those applicable to a new agreement, and to the additional rule that either: "(a) substantial progress toward a solution of the underlying problem shall have been accomplished during the initial period of the agreement or that (b) the renewed agreement is so revised as to be effective for this purpose"; review of all existing intergovernmental commodity agreements by the International Trade Organization; provision by members of all requisite information regarding existing agreements; and full publicity regarding all proposed agreements, the operation of all agreements, and the nature of adjustment plans adopted.

Conclusion

These requirements for the institution and operation of intergovernmental commodity agreements with restrictive powers, if accepted by the member nations of the proposed International Trade Organization and if rigorously applied, would certainly serve to prevent such agreements from being utilized as a means of circumventing the proposed policy of curbing restrictive cartel practices. They should also serve to prevent the powers to restrict production or trade, and to control stocks or prices, from being used for the short-run profit of producer countries, without regard for the interests of consumer countries and without any corrective measures directed to the solution of the problem that gave occasion for the agreement.

[22] Proposals, p. 22.

In a few respects, the requirements need to be clarified:

1. The "burdensome surplus" requirement should be revised to permit an agreement which in other respects satisfies the conditions even though "widespread distress" has not yet developed, provided that there is a demonstrable probability that it will develop unless intergovernmental action is taken.

2. In the case of the "widespread unemployment" requirement, it should be made clear that what is meant is widespread unemployment in respect of the industry concerned in one or more countries on a scale such as to affect seriously the whole economy of that country or those countries.

3. As in the case of the "burdensome surplus" requirement, the "widespread unemployment" requirement should be revised to permit an agreement which in other respects satisfies this requirement even though widespread unemployment has not yet in fact developed, provided that it can be forecast that it will develop in the absence of action to the contrary.

4. It would be unwise to interpret too strictly the provision that the program of adjustment should be believed adequate "to insure substantial progress toward solution of the problem within the time limits of the agreement."

One suggestion for strengthening the requirements is that more attention than is now given in the Proposals should be given to the relation between commodity agreements for the purpose of conservation and the policy of curbing restrictive cartel arrangements.[23] It would appear highly desirable that rules should be drawn up governing the institution and operation of conservation agreements with a view to preventing their abuse, or their use as a means of circumventing the proposed policy of curbing private international business arrangements. For example, it might prove desirable to limit such agreements to "fugitive" resources if they make use of quotas, or restrictions on exploitation, catch, or season; they might be made open to accession by any interested country, including consumer countries; and it even might be considered wise to require, as in the case of other restrictive commodity arrangements, that consumer countries should have a voice equal to that of producer countries in determining limits on production.

[23] The close relation that can exist between a commodity agreement whose main purpose is conservation and a private cartel arrangement may be illustrated by the case of the American-Canadian agreement with regard to the conservation of Pacific halibut resources. Under this agreement an International Fisheries Commission regulates the industry in the interests of conservation. Side by side with the Commission there exists an industry-created Halibut Production Control Board, which is said to be "essentially a cartel of the American halibut industry, operating with the unofficial approval of the Commission and with the co-operation of Canadian interests." S. v. Ciriacy-Wantrup, "International Co-operation in Conservation Policy," *World Economics*, III (1945), 6.

The question has also been raised from time to time in this discussion as to whether the various rules proposed for regulating intergovernmental commodity agreements were practical. Although there are obviously serious difficulties to be overcome in the development of techniques for collaboration between producer and consumer countries, and in the formulation and execution of plans for eliminating the root causes of commodity problems, there is no reason to believe that these difficulties are insuperable or that they cannot be met satisfactorily as governments acquire further experience in working together for the solution of common problems.

THE ECONOMIC MAN AFFECTS A NATIONAL ROLE

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The great task of the social disciplines is to keep the fictions through which they operate within hailing distance of reality. All that is material passes; it is only the intangible which can aspire to being a durable good. It is easy enough to transmute the expediency into the principle—to enthrone the passing usage as an immutable law. It is hard to reduce the eternal verity to the concrete and the finite—to cause the incorruptible to put on corruption.

This urge to escape the here and now inheres not in the stuff we study but in the academic craft we practice. The things we seek to explain—or manipulate—or control—are too big and far off and strange to be encompassed by our observation; so, by the use of the sort of laborsaving devices which are the intellectual's stock in trade, we turn the phenomena we study into mind-pictures which are simpler, truer, and far duller than the objects they profess to describe. The range of fictions, in the absence of which we would all be men without a trade, is as broad as the social studies. The law operates on the basis of presumptions, which when once accepted cease to bother; its phrases, taken from the vortex of life, tend in time to be frozen into "terms of art." The study of government postulates an operation of agencies of state which is shorthand for a multiplex of political processes. And it is only by the divine gift of hypotheses that we are able to contrive an account of the operation of a national economy, whose colorful, shifting, and multiplex variety is today largely unknown.

The use of such simple substitutes for a stubborn reality is as dangerous as it is necessary. The *ad hoc,* the expediency, the instant judgment, translated into abstract language take on the qualities of the durable and the universal. The specific origin and the concrete stuff of which it is made tend to be forgotten; and as postulates upon which systems of thought rest, they acquire the strength of articles of faith. To question assumptions would be to threaten great structures of knowledge; and men of learning cling firmly to the equities in intellectual property with which they have been vested. It matters not that basic presumptions are generally analogues; that the finite which is generalized is a mere fraction of a far from uniform actuality; that a different concrete situation would have touched off another stream of doctrine. The phenomena we explore change; it is decades or even centuries before the abstractions into which they are cast by the mind lose their force. A great source of our current confusions is that we observe our culture through the

darkened lenses of fictions which reality has forsaken. It is not that ancient verities have ceased to be true. They all—if nimbly wrought—possess a timeless and otherworldly sort of veracity. Thus, like a demonstration in Euclidian geometry, the rule of proximate cause, the doctrine of separation of powers, the marginal theory of price are as valid as the assumptions from which they are deduced. It is rather that such formulations are irrelevant—or even mischievous—when projected into situations utterly alien to the concretions where their original raw materials were. A catalogue of fictions, once grand and useful, now drifting away from reality, can be made as comprehensive as you will. For fact departs and fiction lingers; and among the most backward of our arts is that of creating fictions which are not necessarily true and better, but of a certainty more relevant to the employment to which today we must put them.

A striking instance in which there is need to endow the intangible with the mortality of the tangible is the corporation. The "collect"—as Saint Paul would say—is always with us; and, as far back as we have records to give an incorrect account of what went on, groups of individuals have been accustomed to act as if each was a single person. Although the ancients and Roman law and Holy Church knew the corporation—that is, a severalty of persons acting as a single corpus or body—the concept as we are accustomed to apply it to a business venture came late into Anglo-American law. When an enterprise came to be of a size to tax the resources of an individual or of the few who were willing to entrust their own capitals to a common fortune, the norm of limited liability was brought to the rescue. The honorable company was chartered into being to promote mercantile derring-do on a grand scale. The companions were gathered, the articles drawn, ships sent to alien lands, "the things good cheap here" exchanged for the things dear here but good cheap overseas. And all was done for the good of the realm and in the name of the worshipful company.

The common law is the law of the person. Its actions are between persons; its norms are for personal conduct; the guilt it finds is personal; the penalties it visits are upon persons. The common law is a creation out of the materials offered in thousands of cases by a host of judges over centuries of time. Its novelties are usually insidious rather than contrived inventions. And this common law was compelled to find a place for the corporation before its character stood revealed or the significant place it was destined to occupy in the economy could be known. It was out of the question to elaborate a code of corporation law; for that is not the way the legal web is woven, and besides such a venture would doubtless have turned out to be as futile as the attempt of the law to drive forward a priori usually proves to be. The law

resorted to the easy and reasonable short cut of expediency. It called the corporation "a person," thus making the law in respect to the person the law in respect to the collect. So, without fuss or ado, it had a body of law ready-made to serve as cases might happen to come along. It might in instances not fit, but adaptation to changing circumstance had always been the genius of the common law.

The analogue, upon which an intricate legal code was built, turned out not to be the happiest of choices. The person is a human sort of biological organism, full of the weaknesses to which flesh and blood are heir, and blessed with the capacity to shuffle off the mortal coil. The corporation had no heart to be wrung, no body to be thrown in jail, no soul in mortal peril of being cast into hell. The person corporate draws its legal life from a sheet of paper. At its very birth it is deemed to have reached years of discretion. If in origin "domestic" it starts life as a mature being; if an *immigré*, it has to submit to no probationary period before taking out its second papers. It is endowed with a host of biological traits to which no son of Adam could ever aspire. Like the amoeba, it can in a twinkling resolve itself into two corporations; like the queen bee's mate it can, living only for one brief moment, exhaust its life in a single creative act; like the phoenix, it can cease to be yet resurrect itself from its own ashes. It can, like a player on the stage, assume the person of many characters. It can in fact appear as any number of persons and at will shift from one personality to another. Nor does it, like you or me or Henry VIII or Banquo's ghost, have to remain itself. It can, like a celestial host, spiral itself into a hierarchy of corporations; and, like an amorphous spirit, fuse itself with other corporations in such a way as to confuse its own integrity. It can at any moment be alike one and many, remain itself or give way to a successor, demonstrate the truth of the resurrection, and present to the law which attempted to grapple with it the evasive identity of the angel with whom Jacob wrestled all night yet of whom he could get no hold. Such is, at least by random sample, a little of what the common law let itself in for by calling the corpus a person.

Along many fronts trouble was in course of time to break. As a person the corporate entity was entitled to a local habitation and a name. Names came easily; the habitation was to be reached only by a manipulation of legal concepts. The offices, the plants, the outlets of an enterprise corporate are easy to discover; but only the law with its proper process can come upon the habitat of the corporate soul. If the rule of "one man, a single domicile" holds for the person artificial as well as for the person natural, it would seem that the dwelling place of the corporation is the market. But the law, although it spiritualizes the person, cannot authenticate the locale. So the judicial quest for the place

where the corporation hangs it hat becomes a search for a jurisdiction which can be placed on the map. A natural person is migratory, while the identity of the person corporate is pervasive. Natural persons are accustomed—without being embarrassed by the law—to change their domiciles; and there are established procedures by which they can doff the citizenship of one state and don that of another. An artificial person, however, is presumed to abide all its days in the place of its birth. If it aspires to a new allegiance, it must surrender its birth certificate—there will, curiously enough, be no charge of corporate suicide—enter the womb of some national mother and be born again. It may, of course, take on a new life without yielding up the old one; and the two persons, identical in all save citizenship, are of no kin to each other by lineage.

The answer to the legal question of the habitat—the citizenship if you will—of the corporation has not been deliberately contrived. At the beginning it rested upon a little inquiry and a lot of the kind of presumption which was good common sense. Our early American judges, confronted by the corporate entity did not directly make an individual out of the collect. Instead they recognized the corporation as a device through which creatures of flesh and blood carried on. Today jurists, without batting an eye, recite that the corporation is a person resident within, domiciled in, or even a citizen of, the state of the union from which it draws its charter. But such a current fiction is shorthand for an ancient judgment which was far more realistic. The earlier holdings were that the political allegiance of the corporation followed—or reflected—the political allegiance of its stockholders. And, in those days when enterprises were small and venture capital inclined to stay at home, inquiry showed that the shareholders, few in number, were residents of the state from which the collect had acquired its charter. Such a presumption, established upon fact, was preserved in its pristine purity because it made for ease and simplicity in judicial administration. For as corporate ventures ceased to be bound to their native soil and came to treat state boundaries as if they did not exist, judicial inquiry refused to follow. It was difficult—if not quite impossible—to look into the political allegiance of all the stockholders of a far-flung corporate imperium. Besides, such a search would doubtless show that they were citizens of many different states. Then how could the body corporate be nailed down to a single place? So, shuddering at the prospect of utter confusion, the wisdom of the law met the occasion with a nimble invention—and presumed that all its stockholders lived in the state whence the corporation drew its life. It is thus not its charter which gives to this great spiritual entity its terrestial home. It is an act of "judicial contemplation," which by moving a host of persons out of many states into one, that the trick is done.

The result has been to ease the work of judges and bring peace to the courts. But the emerging fiction, which with the decades drifted further and further from fact, was to provoke great busyness within the legal craft. For persons of flesh and blood, by resort to the arsenal of corporate devices, have been able to select the legal habitat which is most hospitable and at the same time to conduct business at the same old stand. Thus for a time New Jersey became a haven of refuge for the persecuted incorporate who nevertheless, while seeking sanctuary, in no way abated its secular activities. And when that state lapsed from the role of good Samaritan, Delaware came to bestow its sovereign protection upon charted outcasts abounding in a good will which could be capitalized. A census of souls corporate would doubtless reveal Wilmington to be the most densely populated city in the land.

Such usages of a modern charity have given an engaging vitality to the law reports. We read, for example, of a famous bout at law between a Mrs. Emma Jensen, a denizen of the Bowery in New York City, and the Southern Pacific Railroad, a citizen of the commonwealth of Kentucky—possibly a devotee of the mint julep, probably a colonel on the governor's staff, assuredly a Christian gentleman—who "operates a railroad running from New Orleans, Louisiana, to San Francisco, California, and maintains a branch office on the docks" of New York. And the presumption, established of old, allows a son of Adam to transport himself in spirit to another state while his physical body remains at rest and thus permits him to claim legal privilege which otherwise he could not assert. The classic example, as set forth in reports of the Supreme Court, is the tilt between the rival taxicab companies. Brown and Yellow had an exclusive contract with the railroad to serve the station at Bowling Green, and sought an injunction against Black and White. But the law of Kentucky said an "exclusive contract" was a monopoly, and the courts refused to grant the writ. Thereupon the owner of Brown and Yellow, who up to that moment had been content with the personality which God had given to him, resolved to exchange it—at least for business purposes—for another made to his order by a "foreign state." So—not in the flesh, but through the alter ego of his lawyer—he made a journey to Nashville and returned in the sight of the law a citizen of Tennessee. Then, claiming that as an alien he might not be accorded justice in a Kentucky tribunal, he instituted suit for an injunction against his rival in the federal court where, as the Supreme Court held, the decisions of the state court need not be followed. The obvious subterfuge was too much for the minority of the bench and a few years ago was indignantly repudiated by the Court which made it. And a series of counterfictions have been invented and put to work which limit—even if they do not counteract—the harm done by the major fiction of the habitat of the corporation. But, in spite of an in-

genious display of legal crochet work, it still remains true that, whereas the taking of the monastic veil means to withdraw from the world, the taking of the corporate veil means to step out into it.

The capitalization of legal fictions by business enterprise is thus definitely invited. The managerial group is well aware that these corporate estates are not to be dealt with as they are but as they appear to the hypothetical eye of the law They can in general ride forth wearing the corporate mask which promises to make the pursuit of gain most lawful. Thus you and I and Robin Hood and Saint Dives, all citizens of Connecticut, may under the laws of that commonwealth organize a Connecticut corporation to do business in Connecticut. Or, at our pleasure, we domestics may seek a charter from Virginia, and operate in our own state as a foreign corporation. Or Ford Morgan, Sosthenes Mellon, Rockefeller Jones, and Long John Silver, all residents of Missouri, may arm themselves with letters of marque and reprisal from Delaware to exploit the good people of the District of Columbia. Or their own corporation, or our own company of gallant and predatory adventurers, may with charter at hand descend upon the guileless innocents of Texas and Rhode Island. In a word, in our corporate capacity we may operate either as natives or as foreigners; and they in their corporate capacity may operate among us as foreigners or as natives. Nor is the indefeasible right to choose your own corporate vestments seriously abridged by the laws of the several states which specify that a certain number of the incorporators are to be native or naturalized citizens. For dummies can be found to fill all such ceremonial roles; and, again by the benevolence of an appropriate fiction, all such dummies are as it were persons in the sight of the courts. Thus the law is satisfied; enterprises are operated as if it did not exist; the great ceremonial heals all cleavage between the law's command and the law's violation.

Nor is foreign commerce to be denied the efficacy which obtains in commerce among the several states. A far-flung corporate imperium goes native by taking out a charter, and becoming a new and different person, in every country in which it does business. Another of like structure seeks insurance against the vicissitudes of domestic politics by entering the countries in which it does business as a national of a country too mighty to offend. The two industrial empires represent much the same patterns; the groups who control them differ only as Tweedledums from Tweedledees; yet to the law they present radically different appearances. It is not on record that the dominant intent of the Pharaohs was to enlighten international lawyers; but the pyramiding of corporations has today become a fine art. A large mine in Timquay is owned and operated—not by a Timquayan but—by a Delaware corporation, which is "a wholly owned subsidiary" of a Panamanian corporation, which is a wholly owned subsidiary of a French corpora-

tion, which is a wholly owned subsidiary of a Nevada corporation, which is a wholly owned subsidiary of a British corporation, which is a wholly owned subsidiary of a Brazilian corporation. There is no use to continue this singsong; the corporate version of this-is-the-house-that-Jack-built is a theme upon which attorneys can write endless variations. Nor is the phrase "wholly owned" of any real significance. It can be materially compromised without putting corporate dominions in serious jeopardy. In fact the best legal taste condemns the merging of corporate identities in so crude a way. Said an empire builder, new style, to his legal staff, "Forge these corporate ties in so intricate and circuitous a way that no court in the world can unravel the network."

As a consequence, the law, public control, diplomacy grasp at reality and grab an evasive as-if. A certain rich man as an anatomical entity is a citizen of the republic of Titania. In his corporate capacity he is a citizen of Delaware. He is the leading stockholder in the Platinum Mining Company, which operates only within his native country. In his sovereign capacity, save on the occasions when control is momentarily lost by revolution, he is the government of Titania. Now in down-to-earth terms, his relations in whatever capacity with his own government are strictly a domestic matter. But if he wraps his affairs in a corporate veil—one carefully selected is enough, though the classic seven are available—the subject becomes a concern of foreign policy. And if his corporation is by his own political state exposed to the kind of harassments we call public control, he can enlist the protection of the country of which he has become a corporate national. Thus the actors on the economic stage may, at their pleasure, operate in any land either as domestics or as aliens. They may, of course, shift roles as convenience warrants; or, by assuming multiple corporate identity, they may at once play a double or a multiple part.

This arsenal of ingenious devices did not just grow. The series of inventions is the product of the recent return to nationalism. Although its usages can be traced back as far as you care to go, as a grand strategy it is largely the creation of the era between the two wars. The pursuit of gain, sayeth the prophet, goeth where it listeth and is not to be stayed by such an affair of the mind as a political frontier. If an enterprise in native garb is stayed, it will adopt any old disguise which will get it across the border. It obligingly adapts its corporate clothes to the latest whims of a neo-mercantile world of tariffs and embargoes and blocked currencies. Nor has business enterprise, now that nations are prone to war, lost its passion for survival. The genuine pecuniary impresario is a money-maker before he is a Rooshian, French, or Prooshian, or even American or Briton. The severities of the political map are to him not objects of patriotic devotion but obstacles in the game of gain which he plays. The wisdom of his trade demands that he insure

himself against those social upheavals which in his contracts he sets down as "a certain event" or "a given contingency," and which we call war. He cannot denationalize himself or his sons or his personal domicile. But he can—and does—denationalize his funds, his capital, his business enterprise. As the military front emerges, he seeks to save what he possesses in the land of the technical enemy. And as a corporation entity he takes on the mask of the neutral or even of the national. If in wartime he seeks to unveil and reveil, he is likely to be caught at indecent public exposure. So it is well to go quietly and in time about the task of changing nationality. Here prevention is far better than cure; so the wily collect, sensing the coming struggle, will prepare a wardrobe adequate to any emergency and arrange a shift of garments well in advance. The matter of proper clothing against the turbulent outbursts of nationalism has become a first necessity.

In the lull in history which we call the nineteenth century capital was free to venture far afield. Amid the closed economies of our times, the urge gainfully to wander comes up against the newly vitalized frontier. The incompatibility between a dynamic business enterprise and the inherited political map demands alertness and invention. An essential of survival is a haven of refuge against "political disturbance" which is likely to erupt into sanctioned and organized violence. Such a need of the corporate collect is met by the nation whose industrial role is to be a neutral. The climate of Switzerland has long been recuperative; it has during the recent war restored to health many a legal corpus which was in serious peril. For German investment has ridden forth under a Swiss charter; and Italian ownership has been converted into properties indigenous to the mountain cantons. As trade with the enemy became taboo, Switzerland, Portugal, Sweden became focal points upon which, so far as circumstance would allow, commerce moved as if the world were at peace. And, if hostile can be turned into neutral, so can neutral be turned into friendly possessions. The myth of the nationality of the corporation is written upon the face of the charter; the reality of corporate control lies implicit within a host of documents which it requires an intricate legal process to unravel. The art of the international lawyer has extracted from mountain scenery virtues which nature never tucked away there.

In such ways it has come about that our techniques of public control, when brought into play, encounter fictions which have left fact far behind. At home the attempt of the national government and of the several states to impose public policy upon "the person artificial" has elaborated a few simple rules of law into an intricate and bewildering code. The maze into which divorce has been driven by the federal system is clarity itself compared with the law of the collect incorporate. The masquerade often demands a resort to statecraft in what is really a

domestic matter. In foreign affairs diplomacy is not at its best when it must forsake actuality and deal with a native group as if it were the national of a foreign power. Nor is it more sure-footed with an enterprise which flies the flag of one sovereign and yet is responsive to the will of another. The Del-a-Major Company, for example, is a solid, substantial, and very corporate citizen of the United States. A subsidiary, Del-a-Minor, owned by it, affects to be an independent entity, sporting a charter from the sovereign state of Bratina. We are at peace with Bratina; Del-a-Minor sends its mineral output to Sweden, which is a way-station, with destination beyond. Our State Department, if protocol is to be followed, makes representations to our minister at Lito; he lays our view-with-alarm before officials of the local sovereignty; the government of Bratina, after a decorous inquiry, hands a discreet reply to our minister who, observing all the proprieties, forwards it to Washington. Thereupon a second and stronger protest is prepared, and the affair enters its second round—while the mineral output continues to flow to its destination. It is, of course, possible for a high official of our government to read the riot act to the high command of Del-a-Major in Wilmington; but that would run against good taste and all the accepted fictions. Public control in wartime can, of course, "pierce the corporate veil." But fictions have a capacity to make life unbearable for those who tackle them. So long as they stand, the burden of proof is upon the official who challenges and each case must by the most laborious process be proved. Substance must be sought amid shadowy legal documents and controls get lost amongst the intangibles of elusive personalities.

The march of events between the wars has been too fast for our fictions to keep up. As between the corporate imperium and the legal presumption of nationality, there is no question where vitality and obsolescence lurk. A year after the late war was under way, the trade journal of a world-wide imperium struck out vigorously at the notion that its political allegiance should be to a single state. It stated that it had plants, properties, market outlets in many lands; that its personnel, speaking a babble of tongues, were citizens of many countries; that it had to accommodate its operations to many systems of law; that its stock, in the ownership of which lay the ultimate control over policy, was freely bought and sold on the open exchange. Flourishing a "therefore," it boldly asked why loyalty to any specific sovereign should be expected of it. The statement was a declaration of current down-to-earth fact, not a manifesto of contumacy or intent to defy the government. As formally we moved into the war, lip service was paid to American nationalism by the same corporation. As peace comes, the common sense of yesterday returns. The corporate imperium does not belong to a single national sovereignty. The political state is to it primarily a customer, a market, a source of gain. The old breathes-there-a-man-with-

soul-so-dead sort of loyalty which we call patriotism is not a term in the equation of profit which will register on the corporation's books. However its officials may personally feel, a sentimental attachment to a native country is a luxury which the law-made corpus cannot—and will not—afford. In the corporate calculus the country signifies as it can be made a source of revenue.

The guilt—if guilt there be—in all this lies in the myriad of decisions which make up a trend. It is too widely diffused to be laid at the door of persons, natural or artificial. But, if the human actors have moved as they have been impelled, it does not follow that the current situation is to be condoned. The pretense by the corporation of taking on a nationality whose obligations it does not assume is fraught with peril. It creates a land not on any map within which the decrees of the political state do not run. The drive of commerce into alien countries has been long recognized as a great civilizing force. It blunts antagonisms, promotes a larger community of interests, draws unlike peoples into a more perfect union. The danger lies not in corporate adventure overseas but rather in solemn agreements between collective gentlemen to stay out of each other's markets. An even greater threat—whether of evil or good—is the weakness which such corporate persons without the law bring to the political state. A government which dominates can make agreements between corporations weapons for waging economic warfare upon governments which keep hands off of business. In a host of such ways the corporate creature defies, or even lords it over, the state, its creator.

This is not the occasion for elaborating a program for the domestication of the corporate ghost. But as a necessary antecedent to positive action we can bring our fictions up to date. The corporation is not a person; nor can it be made a person by a heroic feat of "judicial contemplation." The corporation is a legal form into which a going concern is cast; the corporation is a device through which persons operating within bodies of social usages carry on. If the law cannot escape the fiction as an essential of its trade, it can at least replace its shopworn stock with fictions which bear some resemblance to fact. To continue to employ as basic norms the mind-made concepts of yesterday is not only to confuse the whole problem of domestic control but also to invite perils from abroad. The retirement of fiction, let it be admitted, is no easy task. Huge aggregations of wealth, built upon as-if's which are expected to endure, stand in opposition. A host of skills, a wide range of learning, a great cluster of vested habits will be made obsolete by the liquidation. The return towards reality—to reality is an unattainable goal—is an obvious necessity. Yet here, as elsewhere in this modern culture of ours, the obvious is another name for the radical. Now and then in the course of human events the time comes to return a human affair to the down-to-earth simplicity it possesses in the everyday world.

CARTELS AND THE INTERNATIONAL EXCHANGE OF TECHNOLOGY

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Introduction

The object of this study is to examine the relation of the international cartel to the exchange of technology across national boundaries. This special phase of the cartel problem is properly addressed to economists, since the development of industrial technology and the terms on which it is conveyed determine in part the character and pattern of international trade and exert a manifest influence upon economic welfare. Policy issues related to this subject have become prominent in recent years and it is likely that public interest will be still further intensified by such matters as the future development of atomic energy and war-developed modes of research collaboration between the United States and its allies, requirements of technology for rehabilitation abroad, and aspirations of nonindustrial nations for access to new technology. The ingenuity of economists and policy makers will be challenged, not only by the inherent complexity of certain issues, but also by the larger drift of circumstances which have considerably changed the prewar institutional framework within which the questions of policy must be resolved in the future.

The following analysis falls into two main divisions, the first of which considers the question, do cartels constitute "bottlenecks" in the international exchange of technology? Within this context the general features of international cartel agreements dealing with patents and technology are briefly reviewed and their recent development noted. An attempt is then made to place this development in broader perspective. The strategic situation of cartel agreements as agencies for conveying the preponderant share of industrial technology across national boundaries is indicated, and the division concludes with a statement of the dilemma of policy. The second main division presents the several lines along which some leading issues of policy may possibly be resolved and in this connection reviews briefly certain contemporary developments that may greatly complicate the problem.

I. *The Problem and Its Setting*

Characteristics of Patent and Technical Agreements. International agreements in the field of patents and technology are generically related to private marketing agreements known traditionally as "cartels," in that it is their common objective to eliminate some or all forms of com-

petition between the parties to the agreement. The traditional cartel agreement, on the one hand, seeks *directly* to eliminate or reduce competition in vendable commodities; the technical agreement,[1] on the other hand, attempts the same result *indirectly* by reducing to an agreed system of control the requisite technical information embodied in production or design. Such agreements thus go to the taproots of industry and trade and because of certain unique features tend to be enduring in character and capable, in most instances, of indefinite accretions of control.

International agreements relating to technology assume in practice a diversity of form, content, and economic significance. Certain essential features can, however, be briefly outlined. The unique basis of such agreements is that each of the several contracting parties possesses property interests in a number of national patents acquired by virtue of the fact that a single invention gives rise to a series of patents within the various patent jurisdictions of the world. Although the laws of these jurisdictions are extraordinarily diverse, all grant to the holder of patent rights a degree of monopoly to use, make, and sell under the invention, including thereby control over importation or exportation. In the typical case the parties to the agreement are going business enterprises established in one or more fields of industry and possessing a number of patents in these fields covering technology which is complementary or competing, either or both. The relative bargaining power of the parties depends upon the number of patented inventions each possesses, the strategic character of the patents in question, prior commitments to third parties, and their respective abilities for commercial exploitation of the patents—a matter which in turn depends upon a variety of factors usually comprehended by the term "position in the industry." Given these circumstances the agreement specifies the mutual concessions to be made, together with ancillary terms and conditions.[2]

The most common provisions of the patent portion of the international agreement relate to the apportionment of national jurisdictions within which each party shall acquire rights under all patents subject to the agreement. The proportion of all contracts that do not contain such a provision as to territorial allocation is minor, probably not exceeding 10 to 15 per cent of all technical agreements between the United States and foreign nationals.[3] The restrictive consequences of the territorial allocation of markets thus accomplished may vary from

[1] The term "technical agreement" will be used hereinafter to designate any agreement about technology whose precise form is not particularly relevant in the given context.

[2] E.g., arbitration provisions. Dr. Heinrich Kronstein has contributed the most discerning study of the significance of arbitration in relation to cartel agreements. See his "Business Arbitration—Instrument of Private Government," *Yale Law Journal*, Dec., 1944, pp. 36–69.

[3] This matter has been discussed by Dr. Fritz Machlup. See *A Cartel Policy for the United Nations*, Corwin D. Edwards (Editor) (New York: Columbia University Press, 1945), p. 11.

case to case, and as between territories, according to whether assignment or licensing takes place, the character of the licenses granted, and the practical intent of the parties in case such licenses are "nonexclusive" or include rights to sublicense third parties. Insofar as the control of international trade is concerned, however, the essential effect is that competition between the parties is eliminated or substantially reduced. And frequently it is still further restrained by contractual provisions limiting the field of application of the patented inventions in question, inasmuch as a given process or design may be useful in several more or less closely related fields. Such provisions, it is believed, may be contained in upwards of one-third of all patent agreements.

Other agreed restrictions which occur much less frequently than allocation of territories or division of fields of production are:

1. *Restrictions on sale of output.* The contract may specify that the licensee can produce only for his own use or for certain customers; or that he may sell only through a designated agent.

2. *Restrictions on output.* The licensee, particularly if his license is nonexclusive, may be limited as to output either directly or by progressive graduation of royalties, which may or may not be discriminatory as between other licensees in the same country or in foreign countries.

3. *Restrictions on use of others' patents.* The licensees are sometimes required not to contract with others in specified fields, or less frequently, not to engage in such fields of enterprise at all.

4. *Restrictions on price.* Licensee may be required to maintain prescribed prices or to accept price leadership in any "nonreserved" countries of the world.

5. *Restrictions on purchases.* Purchases of intermediate or raw materials, sometimes at agreed prices, may be required of the licensee.

6. *Restrictions on suits against the validity of patents.* The parties may mutually agree not to contest each other's patent claims and to grant mutual assistance in suits against infringement or in opposition to the patent applications of "outsiders."

Attention has thus far been directed to the comparatively simple and static case in which parties have already acquired international patent positions and are, in effect, swapping titles to monopoly rights, each with a view to arriving at a more advantageous position. The next stage of development in the international agreement relates to provisions which, building upon some variant of the patent framework noted above, restrict the parties as to the use and disposal of their *future* patents. This stipulation is probably contained in somewhat more than half of all patent agreements between American and foreign parties. Among those agreements that provide the principal technical "linkages" between the

national economies of the world it is probable that all include this particular feature. Its significance is extremely great since by this means the relation between the parties is rendered viable and the pattern of control over future inventions is foreshadowed. The number of patents which may thus be brought within the agreement is virtually unlimited, and the ensuing control over an industry is capable of indefinite accretion with the passing of time. Thus with the addition of provisions as to future patents, the technical agreement undergoes a substantial enhancement of its economic and industrial significance. Within their designated marketing territories the parties are unlikely to compete in the sale of products embodying technology on which patents expire from time to time, since this action would either not be profitable if considerable sales effort were required, or would tend to impair harmonious working relations if it were seriously attempted. Other firms unrelated to the contracting parties may, of course, appropriate information no longer protected by patents, but the foreign party whose competition might otherwise be immediately effective is, in the usual instance, precluded from competitive rivalry. The agreement thus becomes a restrictive covenant as to the disposition and use of the results of future research activities or rights acquired from third parties, and as such it emerges from the domain of national patent laws into the broader field of international commercial policy.

One further stage in the development of the international technical agreement remains to be examined. Discussion has been confined thus far to patent rights, present and future, and their disposition and control under contractual arrangements. The underlying presumption has been that the technical information covered by such patents has already been disclosed on an international basis and after a limited period will revert to the public domain of all countries. In this sense the national patent offices of the world may be said to have provided the classical mode for the interchange of technology. Under modern scientific conditions of industrial research and development, however, it must be recognized that a portion of technology, and perhaps a major portion, is not subject to patents. This fact is attributable either to lack of status required for an "invention," to incompleteness with reference to the production of a "useful result," or to deliberate choice. In other words, an important portion of industrial technology consists of unpatentable or unpatented know-how, operating results, and research in progress which firms seek (with varying degrees of success as time passes) to maintain in confidence. The international technical agreement reaches full development when, in addition to the disposition of present and future patents, it provides for the interchange of information of this character.

It is probable that somewhat more than one-third of all patent

agreements provide for such a mutual undertaking, but as in the previous instance of future patent rights, the question of numerical proportions can satisfy nothing but the most idle statistical curiosity, in view of the diversity among patent contracts considered as a whole. However, it is quite certain that all of the more important international agreements provide for the exchange of confidential know-how. The significance of this feature is outstanding since it permits the interchange of information that is either necessary or valuable in the successful commercial working of a patent and makes possible the numerous benefits of mutual co-operation between firms in research and development.

The confidential information section, of course, bears a close relation to the patent provisions of the agreement, and indeed would hardly be feasible without the latter. For example, the so-called "licensed territory" for the use of unpatented information coincides with territorial divisions as to patent rights. Still more important, without a definite settlement as to patents, each party in conveying information to the other would run the risk that the other party might improve or develop such information into a patentable invention which could be used competitively or as a bargaining weapon against the original party. Because of the fugacious character of unpatented technology, arrangements providing for its interchange require continuous, active, and more or less intimate collaboration between the parties. Not only must their mutual relationships be established, but provision must also be made for their relations with third parties. In general the confidential information section provides that disclosure to third parties may take place only with the consent of the party who originated the information in question and in practice the restriction which may thus be exercised can be extremely burdensome on the second party whose relations to third parties are thereby determined in large measure. A will not consent to the transfer of information by B to C, unless C in turn is sufficiently restricted by his agreements with B to afford adequate protection to A or to other parties to whom A may have commitments or obligations. If the firms involved are substantial within their industry, this mutual veto of relations with outsiders may impose a severe practical limitation upon the access of such outsiders to new technical developments in the industry, and even in territories where outsiders may be granted nonexclusive patent licenses, the effectiveness of competition is greatly modified.[4]

The Setting of the Problem. The technical agreement as described above is a strictly contemporary institution, having come into existence for

[4] For further elaboration of this point see *Economic and Political Aspects of International Cartels* (Monograph No. 1, Subcommittee on War Mobilization of the Committee on Military Affairs, U. S. Senate, 78th Cong., 1944).

all practical purposes early in the twenties with the adoption by industry of applied scientific research covering entire fields of production and conducted on a sustained basis under corporate direction.[5] Also, it has been conditioned by the growth of the modern corporation along international lines and the establishment of the great international corporate complexes of today. The technical agreement is not therefore an alien development intruding into an otherwise unchanged world; rather, it is a response above all to recent technological circumstances of industry. This fact is manifested by the fields of industry in which international technical agreements have assumed the greatest importance; viz., electronics, illumination, and other electrical products and apparatus; dyestuffs, explosives, pharmaceuticals; plastics and artificial textile fibers; synthetic rubber; petroleum refining; synthetic fertilizer; metallic alloys and compounds; aircraft equipment.

Within these and certain other fields American and foreign firms participate in technical agreements, which in total number run well into the thousands, including the simpler types of patent contracts described above. Within each field of industry these agreements are grouped into a more or less closely interrelated system, or in some cases broadly competing systems, each of which has as its main axis one or, at most, several agreements between the major industrial combines. The size of such concerns enables them to engage in broad and sustained research programs and to maintain special organizations for the management and control of research results, mainly through patents. Their size and geographical scope of operations further enables them to exploit technology on an international scale. A list of such major concerns would, no doubt, be relatively short, including fewer than one hundred members of which American-owned and controlled companies would probably predominate with German, British, Dutch, Swiss, French, Italian, and firms of other nationalities following in descending order of magnitude. The importance of firms of a given nationality, particularly those of the smaller industrial nations, varies with the industry in question. In artificial textiles, for example, certain Dutch-controlled companies and their international agreements are highly significant; the same may be said of Swiss concerns with respect to pharmaceutical specialties. American firms have been direct participants in the major technical agreements in almost all fields, most frequently in conjunction with German and British parties. The role of firms of a particular nationality in originating and activating international agreements also varies from industry to industry; for example, Americans have generally been pre-eminent in the electrical fields while in certain chemical lines, the Germans, mainly through I. G. Farben, have been extremely active.

[5] See G. Perazich and P. N. Field, *Industrial Research and Changing Technology* (Works Projects Administration, National Research Project, Philadelphia, 1940).

It would undoubtedly be possible from case to case to map out the network of technical agreements covering each field of industry and its subdivisions, and to indicate the main trunk lines for the dissemination and control of the underlying technology. Such studies would, however, be lengthy and complex as indicated, for example, by recent Department of Justice proceedings against certain international cartel arrangements.[6] In the absence of these studies it is necessary to resort to general information concerning the main characteristics of agreements in certain leading fields of industry for further appraisal of the significance of such agreements, a task to which attention is next directed.

The significance of an international technical agreement extends beyond the restrictions it imposes on the marketing process and its influence upon the location and character of production.[7] As the principal means of exchanging new industrial technology based upon the advances of modern science the agreement bears an evident relation to the international dissemination of scientific information of a "pure" or "background" character. This vital relation which has hitherto been neglected in writings about international cartels deserves emphasis.

One of the outstanding characteristics of modern culture is the increasing concern on the part of every country for the development of scientific knowledge as the basis of its future progress and security. This concern has been enhanced by recent wartime experience which has demonstrated that scientific and technical resources are quite as vital as the possession of natural resources, and which has led nations to mobilize and develop their scientific activities as never before. The Director of the OSRD, in his Report to the President, has concisely summarized contemporary opinion as to the essentiality of progress in science and technology:[8]

> Progress in the war against disease depends upon a flow of new scientific knowledge. New products, new industries, and more jobs require continuous additions to knowledge of the laws of nature, and the application of that knowledge to practical purposes. Similarly, our defense against aggression demands new knowledge so that we can develop new and improved weapons. This essential, new knowledge can be obtained only through basic scientific research.

This Report presents the case for public support of scientific education and research, and emphasizes the importance of freedom of inquiry and the fullest dissemination of scientific knowledge both nationally and internationally. As the document states:[9]

[6] See, e.g., *United States of America* v. *Standard Oil Co.* (*N. J.*) *et al.*, No. 682 Criminal, U. S. District Court (N. J.), November term 1941; *United States of America* v. *Standard Oil et al.*, No. 2091, U. S. District Court (N. J.), Decree filed March, 1942, and Supplementary Decree filed April 7, 1943; also *Standard Oil* (*N. J.*) *and others* v. *James E. Markham*, Civil Action No. 26–414, U. S. District Court (Southern District of New York) Opinion, November 7, 1945.

[7] This aspect has been discussed at length elsewhere. See *Economic and Political Aspects of Cartels*, *op. cit.*; *Canada and International Cartels* (Ottawa: Report of the Commissioner, Combines Investigation Act, 1945).

[8] See *Science: The Endless Frontier* (A Report to the President), by Vannevar Bush, Director of the Office of Scientific Research and Development, July 5, 1945, p. 1.

[9] *Ibid.*, p. 3. See also Appendix 3, pp. 107–108.

> International exchange of scientific information is of growing importance. Increasing specialization of science will make it more important than ever that scientists in this country keep continually abreast of developments abroad. In addition a flow of scientific information constitutes one facet of general international accord which should be cultivated.

While the Report thus recognizes the international aspect of research and scientific knowledge, its emphasis upon this aspect appears altogether inadequate. As scientists are quite aware, the history of the development of science in its manifold aspects is fundamentally international in character; and the wartime experiences that have prompted the submission of the Report have demonstrated the continuing validity of this fact. No more striking illustration could perhaps be found than the case of the creation of the atomic bomb whose development by this government has involved the comingling of scientific contributions and personnel of American, British, Hungarian, Italian, German, French, and Danish origins.

The dissemination of basic scientific information across national frontiers has remained remarkably free and complete; modern nations have generally fostered and promoted such interchange through the media of scientific texts and numerous other publications, scientific conferences and conventions, and foreign travel by scientific personnel. Although the process of interchange could perhaps be further improved and accelerated, it is probable that by far the greater proportion of scientific information created under private and public auspices, and capable of dissemination, actually gets disseminated to those countries having the requisite cultural and institutional bases. It is upon this ever growing and internationalized fund of scientific information that the industrial arts and technology of every country are founded; and it is against this background that the significance of the private technical agreement must be reckoned.

The utilization of basic scientific principles in the service of applied technology requires further research and development. Moreover, in the conduct of this work the large business enterprise has acquired a significant advantage. As the Report implies (page 60) and as statistics of patent assignments seem to bear out, it is this class of firms which is in the position to derive chief, though not exclusive, advantage of the international community's support of basic scientific knowledge and the development of scientific talent in its youth.

The international dissemination of the results of applied research in the field of industry consequently stands in marked contrast to the situation regarding basic scientific knowledge. Coincident with its development, one portion of industrial technology is reduced to the control of domestic and foreign patents. The remaining or unpatentable portion is conveyed in secret and utilized under the restrictions of the typical agreement outlined above. Thus while the world freely interchanges its

basic scientific knowledge, industrial technology moves across national frontiers only under highly restrictive control and in the main through a comparatively small number of firms in each industry.

Under prevailing circumstances it is to the advantage of the individual firm to strive for the strongest monopoly position through patents and other means both in its domestic market area and in foreign areas in order that it may possess maximum bargaining strength in any possible agreement with rivals or potential rivals. Once an international alliance has been obtained, it is likewise to the advantage of the parties to make the framework of their joint venture as tight as possible, admitting outsiders only where clear advantage is perceived and under the greatest possible assurance against the risks of competition.

This logic is particularly compelling whenever, under any arrangement, confidential information is involved. Such information may cover entire processes of an unpatented nature and thus may enable the recipient to duplicate the originator's product and invade both his domestic and foreign markets; or the information may be a source of significant savings in cost of production and contribute to the same competitive result. Still more awkward from the standpoint of the originator, such information may provide the basis for further research and development leading to patents which in the possession of an uncommitted party would be a threat not only to production but even to further research along particular lines on the part of the originator. The mutual advantages of interchanging the results of experimental and development work and operating data can, of course, be considerable. For example, repetition of costly errors can be avoided; unnecessary duplication of experimental and pilot plant operation can be eliminated; "cross fertilization" of ideas, so important in all intellectual progress, can be fostered; operating performance may be cross checked to guard against undetected inefficiencies of production.

These are undeniably important social advantages; they are secured, however, only at the cost of serious disadvantages attributable to monopoly controls inherent in the technical agreement. Unfortunately, in the absence of appropriate safeguards, it is submitted that no business enterprise whether under public or private management would normally disclose its technical developments; and in the event that such safeguards were entirely precluded, the international exchange of industrial technology would be confined in the main to those "leakages" of information that inevitably occur with the passage of time. This circumstance presents a fundamental dilemma in the search for a desirable public policy. It may be possible, however, both through positive and remedial measures, to effect substantial improvements over the previously existing situation in order that the development and interna-

tional exchange of industrial technology may more nearly keep pace with and more fully utilize the potentialities of the growing fund of internationalized scientific information.

II. *Approaches to a Solution*[10]

Three main avenues of approach are open to efforts in the interest of improving the international exchange and co-operative development of technology. These are (1) remedial measures to eliminate and prevent the abuses that have surrounded international technical agreements; (2) co-ordination under intergovernmental arrangements of private industrial research activities in particular research projects; (3) free international disclosure of industrial technology developed by public research agencies. While perhaps none of these approaches leads to a definitive solution of the problem at hand, each may contribute more or less to forward progress as the larger circumstances of world affairs will permit.

(a) *International action against restrictive practices.* It has been proposed by the government of the United States, with the concurrence of the British Government, to establish an International Trade Organization which among other things would provide for individual and concerted action to abate restrictive business practices affecting international trade. Corrective machinery would be provided within the ITO by a special agency whose principal function would be to determine, in cases of complaints by governments or by individual firms, whether remedial action is warranted and if so, to make appropriate recommendations to member governments. The agency would also keep informed of actions taken by such governments to carry out these recommendations and report on their effectiveness. In view of their number and importance it may be expected that certain of these cases will include, among other elements, arrangements pertaining to patents and technology. The international agency will thus be faced with the necessity of determining whether or not the restrictive practices and ancillary devices have the effect of frustrating such objectives of the International Trade Organization as equality of access to materials and markets and the expansion of international trade.[11]

The most important body of experience which can be drawn upon by the international agency is provided by the recent actions of the United States courts under the antitrust laws of this country. Since the outbreak of the European war the United States has brought more than forty cases against international cartels which, with few exceptions,

[10] Professor Walton Hamilton has contributed a searching article on some fundamentals of this problem. See his, "Cartels, Patents, and Politics," *Foreign Affairs*, July, 1945, pp. 582–593.

[11] See *Proposals for Expansion of World Trade and Employment* (Department of State, Nov., 1945), pp. 4–5, 19.

have involved patent and technical arrangements.[12] Most of the cases thus far resolved have included German nationals among the foreign parties to the agreement and have been settled by consent decree. Such decrees typically stipulate that the defendants will withdraw from the allegedly illegal contracts and that American patents subject to the agreement will be open to general licensing.[13] Since these cases have not been tried, they do not of course provide a record of the interpretation of law by the courts; this remains to be settled in a substantial number of important cases now pending. One important cartel case has, however, been decided; namely, the so-called "*Titanium Pigments*" case[14] which involved American, British, Canadian, German, Norwegian, Japanese, French, Italian, and Czechoslovakian concerns. This case is significant since it illustrates (1) the complex legal, corporate, and technological setting with which such agreements are surrounded in actual practice; (2) the extent to which monopolistic excrescences may develop from a technical agreement; (3) the disposition on the part of the United States courts to find such arrangements in restraint of trade and in violation of the antitrust laws; (4) the lines along which remedial action may proceed and the possible effectiveness of unilateral action on the part of a single government in remedying the abuses. In its Opinion the Court held as follows:

> Another inevitable consequence of the NL-DP agreement has been the proliferation of patents. The chief spur to private resistance to the grant of patent monopolies has been withdrawn from the parties who, ordinarily, would be chiefly concerned. It is not without significance that, despite the jaundiced eye with which the courts have been examining and rejecting patents in recent years, not a single one of the hundreds of patents here involved has ever been litigated. The result of that is that the newcomer is confronted by a veritable jungle of patent claims through which only the very powerful and stout-hearted would venture, having a regard for the large initial investment which this business requires. These patents, through the agreements in which they are enmeshed and the manner in which they have been used, have, in fact, been forged into instruments of domination of an entire industry. The net effect is that a business, originally founded upon patents which have long since expired, is today less accessible to free enterprise than when it was first launched.
>
> I need not consider whether an exchange of patents, present and future, between competitors, is violative of the Sherman Act. I assume that such an exchange standing alone is innocent. But in the context of the present case this exchange between two corporations, who between them controlled the entire market, becomes an instrument of restraint, available for use and used, to continue the mastery of the market which NL and DP achieved by means of the illegal international agreements.

For the purpose of remedying the restrictions imposed on domestic

[12] See I. B. Oseas, "Antitrust Prosecution of International Business," *Cornell Law Quarterly*, Sept., 1944. The appended "Table of Foreign Monopoly Cases" (pp. 62–65) and the author's distinction between the present an dearlier foreign monopoly cases (p. 50) are instructive. See also *Cartels and National Security* (Report from the Subcommittee on War Mobilization to the Committee on Military Affairs, Senate, 78th Cong., 2nd sess.; Part II, *Analytical and Technical Supplement*), pp. 41–60.

[13] See, e.g., *U. S.* v. *Standard Oil (N. J.) et al., op. cit.*

[14] *U. S.* v. *National Lead Co., Titan Co., Inc., and E. I. DuPont de Nemours and Co.*, Civil No. 26–258, U. S. District Court (Southern District of N. Y.). *Opinion* filed October, 1945. *Final Decree*, entered October 11, 1945.

and international trade by the cartel the Court decreed the following measures:[15]

(1) Cancellation of the restrictive agreements in question and injunction against any future arrangements to divide sales or manufacturing territories, allocate markets, limit or prevent exports from the United States, grant exclusive markets to third parties, or preclude such parties from any market.

(2) Opening of the defendants' existing patents, or patents applied for or obtained within five years, to nonexclusive licensing on a reasonable royalty basis, with the proviso that if an applicant for such licenses also has titanium patents, he must give a reciprocal license to the defendant companies. The defendants must also disclose to the licensee, for a period of three years, all know-how used in connection with the patents in question.

(3) Injunction against "attempting to enforce any rights under any foreign patents owned by them or under which they are the exclusive licensees to prevent the exportation of titanium pigments from the United States to any foreign country."

(4) Divestiture by the defendants of their stock interests in certain foreign subsidiaries jointly owned with foreign producers; alternatively the defendants may acquire all of their stock of such foreign subsidiaries.

This decision and the preceding consent decrees warrant careful analysis by scholars to determine the effectiveness of the remedial techniques and their suitability for purposes of recommendations by the International Trade Organization in similar cases. It would be highly instructive if certain of the above cases could be selected and one or more model solutions applied to test the effectiveness of various remedial techniques. Particular attention requires to be given to the technological kernel within such cartel patterns to determine the extent to which the practices and arrangements of the participating firms (1) were relevant to the protection of their proper claims in this technology and its development; and (2) exceeded the permissible scope of activity permitted under the monopoly grant of the patents in question. In short, the matter for study is whether and to what extent the arrangements were appropriate vehicles for the exchange of technology and mutual use of patents, as opposed to mere agencies for a contrived restraint of trade whose incidental by-product was the exchange of technology.

Attention has not been given in this paper to administrative problems likely to be encountered by the proposed international agency, or to the prospects of developing over a period of time standards and procedures for action. Such a discussion falls outside the scope of the present

[15] See *Final Decree, op. cit.*, Secs. 5–10.

study. It may be suggested, however, that concerted international action should prove capable of substantially eliminating and preventing those restrictive features of technical agreements which prevent the widest access to the use of industrial technology consistent with its profitable development. The extent to which such action will be forthcoming in the future is, of course, not predictable with certainty; however, since most nations already possess judicial or administrative sanctions by which to implement many remedial measures, no revolutionary changes would appear necessary on a national level to bring about an improvement over the prewar situation.[16]

(b) *Unification and modification of patent laws.* Further remedies that would contribute to a more desirable international situation in respect of technical agreements are to be found in the improvement of existing national patent laws and the International Convention for the Protection of Industrial Property. The patent laws of the world comprise some 130 separate jurisdictions which present a bewildering variety of provisions as to procedures and such matters of substance as territory covered, requirements and tests of novelty, duration, nonpatentable categories, and remedies for abuse of patents.[17] Unification and modification of this legislative field is a matter closely related to the international dissemination and use of technology, and accordingly it is a subject to which governments might well give early attention.

A preparatory commission, in formulating recommendations for an international conference, should consider the changes in patent legislation appropriate to modern scientific technology and should seek means to bring patent laws and practices into relation with the broader objectives of international commercial policy. This reconciliation would require that recognition be given to the facts of recent experience concerning the use of patents through concerted arrangements to monopolize international trade in entire fields of industry.[18] It would also require recognition that the numerous patent jurisdictions of the world form an interrelated system whose reason for existence, from the standpoint of the world economy, is to promote invention and assist in the wide dissemination of technology and its prompt utilization in industrial improvements.

For example, it has long been recognized that concerted measures should be taken to correct the following situation. At present the patent

[16] Laws prevailing in the Western Hemisphere have been discussed by C. R. Just, "Antitrust Laws in North and South America and the Cartel Problem," *Journal of the Bar Association* (District of Columbia), Apr., 1945.

[17] See, for example, White and Ravenscroft, *op. cit.;* also Jan Vojacek, *A Survey of the Principal National Patent Systems* (New York: Prentice-Hall, 1936), p. 181.

[18] See, for example, Patent Commissioner of New Zealand, *Fifty-sixth Annual Report of the Commissioner* (Wellington, 1945). The report notes the establishment by the New Zealand Government of a committee to investigate the patent laws; it recommends, p. 2: "(9) The provision of special means to prevent patents being used to control [an] industry. . . . "

office of a country in which an invention originates may refuse to grant a patent on various grounds such as lack of sufficient status to constitute an invention, or the office may narrow considerably the claims asserted by the applicant. Before such action has transpired, or afterwards, the patent offices of other national jurisdictions often grant valid patents on a similar application pursued in foreign countries. Thus the applicant, although unsuccessful in his own country in obtaining monopoly rights may, by virtue of monopoly rights secured elsewhere, be put in a position to restrict trade with and between foreign countries. Similarly, a patent may expire or be terminated (for example, for illegal use in an international monopolistic combination) in the original national jurisdiction and yet remain valid without question in other jurisdictions, thus frustrating in part the remedy applied by the given country.[19]

The purpose of this brief exposition of remedial measures in the field of patent legislation has been to illustrate a few existing anomalies and to express a point of view which might provide the basis for a number of important modifications both in national statutes and the International Convention for the Protection of Industrial Property. In concluding this topic it is fitting to quote the opinion of a group of experts in Britain:

> It is moreover undeniable that there is considerable difficulty in the way of a satisfactory revision of the patent laws by any one country without the co-operation of all countries largely concerned. An improved international basis for patent law, accepted by all the leading industrial countries, and including effective checks on the use of "blocking patents," is greatly to be desired.[20]

2. *Intergovernmental Management of Research Pools.*

During the war the necessity for rapid development in certain technical fields has lead to the voluntary pooling under government auspices of the research efforts of interested firms. In some cases it has been recognized that advantages could be multiplied by co-operation with firms engaged in similar research in other Allied countries, and measures for intergovernmental co-ordination where devised to meet this need. This wartime innovation may find certain peacetime applications since its essentials are comparatively simple and involve no derrogation of the rights of enterprise. Briefly, the governments by joint agreement, undertake to assess the relative importance of the discoveries of each party and upon this basis to allocate such patent rights as may emerge, having due regard for the access of all contributing firms to the full technology and to domestic and international market opportunities. Equal access to the full technology is provided by a pooling arrangement in each country under which the contributing firms enter into

[19] F. L. Vaughan has mentioned this problem in his discussion of annual fees for maintaining patents. See his *Economics of our Patent System* (New York: Macmillan, 1925), p. 239.

[20] Cf. Nuffield College, *op. cit.*, p. 37.

contracts with a government agency. Each contractee agrees to disclose all research results to the agency which in return makes available all such information received from other firms party to the agreement. The agency is empowered by contract to assess the significance of the contributions of each party and as patentable inventions arise,[21] to assign titles or other rights to a given party or parties with the stipulation that licenses must be granted freely and on a reasonable royalty basis.

The governments of each country concerned, having carried out identical pooling schemes, next enter into an agreement providing for the interchange of all research information developed by their respective contracting firms and for the final disposition of patents and patent rights. Under such an agreement the governments perform as follows:

(a) *In the contracting countries.*

(1) Each government determines the relative value of contributions made to its pool both by its own contractees and those under the jurisdiction of the opposite government.

(2) In consultation with its opposite, each government determines on the basis of contributions the final disposition of rights and titles to patents issued under its *own* national patent jurisdictions.

(3) Each government undertakes to require that its nationals who emerge with patents in the opposite country shall assign such patents or grant licenses thereunder to firms designated by the government of the opposite country under reasonable and nondiscriminatory terms.

(b) *In other countries.*

(1) In consultation with each other, the governments jointly determine the relative value of the contributions of firms within the combined pool to patents issued in third countries, and the disposition of titles to and rights under such patents.

(2) Each government undertakes that no such patent or right thereunder shall be used to impede exports from either contracting country nor to prevent licensing of manufacture upon reasonable terms in other countries.

The advantages of such an arrangement are that it makes possible the benefits of intimate international collaboration in research without such restrictions as market allocation, division of fields, and other elements of manufacture or marketing that accompany purely private arrangements. The parties must, of course, agree to maintain in confidence the research information being developed within the international pool in order that nonparticipating firms may not reap advantages without making contributions to the project. Also, since an incentive for private firms and a means of recovering their research expendi-

[21] Each government may also reserve the right to decide whether or not a patent shall be applied for on any particular contribution.

tures must be provided for, patents and royalties derived therefrom must be contemplated; furthermore, the allocation of rights to receive such royalties must be in accordance with the value of the contributions of each participant. Under this arrangement the research process is no longer coupled with a global strategy of monopoly in which patents become pawns whose value and disposition depends upon a prearranged scheme based in large measure upon the relative commercial bargaining strength of the parties. On the contrary, the intergovernmental pooling arrangement provides a kind of "international referee" system that seeks to avoid the usual restrictive framework for the interchange of technology.

The limitations of this arrangement should, however, be emphasized. For one thing, it would appear to be most feasible when applied to fairly well-defined projects of limited duration, say three to five years at the maximum, and preferably less. Administrative difficulties and complexities would doubtless multiply if research in a broad field of industry were attempted. The number of participating firms in each country and the number of countries directly concerned would be bound to increase and at some point reach unmanageable proportions if the scope of a project were enlarged from a particular product or process to an entire class or group of commodities or processes. Also, as the field of research to be covered is broadened, the research goal or "target" becomes less sharply defined and less subject to agreement by the possible participants. Furthermore, since the outcome of any research venture is speculative, firms would be the more reluctant to bind themselves to such governmental refereeing in a project covering all or a major portion of their entire scope of commercial operations. Still more conclusive, research in a broad field has no definite goal or terminus in light of which a project could be discontinued without prejudice. Finally, a project will find supporters most readily if it concerns a relatively new possibility in the sense that little or no previous and successful work has been accomplished.

The significance of such limitations is lessened, however, by the fact that it is precisely in the case of new products or processes that the absence of cartelized restrictions is most essential. Monopoly in many industries owes its origin to the exclusive control of a relatively small number of basic patents controlled by one or a few firms. During the life of these patents opportunities for research by potential competitors is restricted, thus allowing the patent control group, by virtue of its monopoly position, an opportunity to acquire or secure improvement patents sufficient to constitute a severe and continuing handicap to all other firms. If basic patents were open to reasonably wide use from the outset, research competition in improvements and variations could take

place on more nearly equal terms. Furthermore, there would appear to be no real disadvantage in the fact that a comparatively small number of firms situated in only a few countries participate in a specialized venture, provided that access to the resulting patented technology is made available on reasonable terms or that importation of the product is not monopolized or restricted.

(3) *Direct Interchange Between Governmental Research Agencies.* The exigencies of national defense have led to vast outlays on the part of this government for research activities directly performed by public agencies or financed by them.[22] Proportionately large expenditures have also been made in many other countries, most significantly in the United Kingdom and countries of the British Commonwealth, and it is likely that in the formerly occupied nations of Western Europe, governments will also engage in research on an increasing scale. While information is lacking in the case of the Soviet Union, it is likely that its large-scale programs of pure and applied scientific research will be continued and may even be increased in comparison with prewar years.[23] The prospect thus arises of a number of governments engaged in the conduct of research partly with a view to its application in industry. In connection with such public research programs governments may find it advantageous, for the same reasons as private firms have in the past, to conduct joint projects. The mechanism of such an undertaking would be exceedingly simple, involving merely an undertaking to disclose experimental information and, when appropriate, to allocate among the several governments the portions of research that each would undertake in forwarding a joint program. Whether the governments conduct their research activities individually or in collaboration, however, the problem of the control and protection of such information necessarily intrudes itself; and it may therefore be appropriate to indicate several problems that must be faced, having regard primarily for their international aspects.

It would be unduly optimistic to assume that governments may satisfactorily disseminate the results of public research applicable to industrial fields merely through international publication. The leading issues of the problem may be brought to focus by considering briefly the question of patents and their implications in respect of such governmental research activities. By way of introduction, a few general remarks on prevailing practices may be in point. Present methods of handling technology developed under governmental auspices represent a hodge-podge

[22] See *Legislative Proposals for the Promotion of Science* (Subcommittee on War Mobilization of the Committee on Military Affairs, U. S. Senate, 79th Cong., 1st sess.), pp. 21–28. For a brief critique of statistical measurements of "research" see Nuffield College, *op. cit.*, pp. 7–8.

[23] For a description of the extent and progress of Soviet research, see A. E. Fersman, *25 Years of Soviet Natural Science* (Moscow, 1944).

of developments, some recent and others old. Generally speaking, with respect to industrial technology, the United States permits its research employees and contractors financed by public funds to acquire full rights to foreign patents and "commercial" rights to domestic patents.[24] The governments of Great Britain and Canada, while permitting or requiring patents abroad, retain control by virtue of contracts with governmental research employees or contractors. The laws of the Soviet Union permit a citizen, with the permission of the government, to apply for patents abroad; but this right seems to have been very rarely exercised in practice.[25] From the standpoint of an international system of dissemination the resulting picture is one of considerable confusion which, in actuality, is reflected in the present patent situation regarding technology in certain recently developed fields such as radar. In each patent jurisdiction there is a quadripartite series of overlapping, complementary, and competing patents owned or controlled by private domestic parties, their respective national governments, private foreign parties and foreign governments or their agencies. Heroic measures may be required to bring order out of this and similar situations in order to permit the maximum commercial use of the underlying technology and to determine the status of future patents. Mere *ad hoc* remedies, perhaps differing in the various countries, cannot go to the roots of the problem. If governments in the future are to engage in substantial research programs having industrial applications, a systematic and mutually agreed approach would seem necessary or at least highly desirable.

In general, there are two main approaches that might be followed, one of which seeks to minimize the use of patent techniques while the other would employ them widely for prudential reasons but would seek to avoid restrictive consequences. Each of these has its advantages as well as its disadvantages. The "free" or "no patents" approach is based on the assumption that patent entrepreneurship on the part of governments would be costly, administratively cumbersome, possibly restrictive, and might have unwelcome repercussions on the entire patent system. Since simplicity and international political probity are important, any system which promises these results deserves consideration.

So far as is known to the writer, governments have followed a policy of licensing foreign patents under their control on a nonexclusive and nonrestrictive basis, and by a sort of comity have granted royalty-free licenses to agencies of foreign governments under patents controlled

[24] In such fields as agriculture, public health, and other nonindustrial pursuits in which patentable discoveries may be made, the practice is generally followed of acquiring domestic patents and dedicating these to the public. This result follows not so much from a concerted governmental policy as from the fact that various agencies have followed different lines of action in this respect.

[25] The complexities of the situation in which the state also operates industrial enterprises are discussed below.

within the jurisdiction of such governments. Thus since the international patent practices of foreign sovereigns have been hitherto benign and since the problem has been of relatively small dimensions, the issue of principle has remained dormant. It seems virtually certain, however, that this status will not continue if either or both of these conditions is violated. The exercise by a foreign sovereign of monopoly rights within the domestic economy of another country by virtue of letters patent would be an intolerable invasion of national prerogatives, and even the existence of a substantial patent control in such foreign hands might be disturbing.[26] Consequently, there are compelling reasons for the belief that technology derived from governmental research should properly be made freely available for dissemination on an international basis without the mediation of patents, patent contracts, and other similar techniques more suitable to private parties. This policy, as indicated above, has been traditional on the part of governments in certain fields, free dissemination and exchange of useful information being the general practice in such important areas as plant and animal husbandry, medicine, public health and sanitation, housing, and other pursuits. Certainly, the magnitude and consequences of free interchange within these nonindustrial fields should not be neglected in discussions of policy regarding the disposition of industrial technology developed under public auspices.

Despite this presumable advantage of a program of free disclosure of research results, certain complicating factors would seem inevitable if it were pursued. For example, in countries which do not examine patent applications for novelty, private parties may obtain patents covering claims based on insignificant modifications of the research information disclosed by public agencies in other countries. International trade in new products might thus be foreclosed or seriously impeded by the creation of such legal monopoly rights. This contingency could perhaps be met by means of an international convention under which the adhering governments would undertake to carry out appropriate measures to prevent the improvident issue of such patents. Unless the magnitude of industrial research carried on by public agencies becomes much greater than seems likely in the calculable future, it should not be difficult to devise and implement a system of mutual notification between governments as to research results originating under the public research programs of each country. In lieu of such a convention or

[26] In practice during times of peace the degree of control exercised by a foreign government through private agencies owning patents abroad is not always clear. Thus in the period before the two recent world wars it has been widely alleged that German firms exercised command over their foreign patents in the interest of German national policies. Public repercussions following such disclosures suggest the hypothesis that the equal treatment of foreigners in respect of patents can prevail successfully only under a regime characterized by a fairly complete separation of private industry and the economic foreign policies of the national state.

pending its establishment, it might be a feasible policy for a nation to join with foreign governments in a series of agreements which would provide that each government would undertake to prevent (a) the filing of applications for letters patent on the results of research financed by its public funds, and (b) the issuing of patents on such research results to nationals of any other country.[27]

Although these safeguarding devices may avoid direct appropriation and monopolization abroad of governmental research results, they would not apparently meet the further and very real contingency that private firms probably will make patentable improvements on the unpatented governmental research results. If sufficiently important, such patents might even block further exploration by governmental agencies along important lines. Also, such improvement patents could be employed to control the use of the technology by industry generally, thus frustrating the purpose of the public program in making freely available to all parties the results of its research activities.

As a means of avoiding these difficulties and frustrations it may therefore be argued that each government should patent and reduce to its control inventions or discoveries made under its auspices, and should use such patents as bargaining instruments with private firms who undertake further research. The purpose of such bargaining would be to insure that improvement patents subsequently obtained by private parties at home and abroad would be generally available on a nondiscriminatory basis under reasonable royalties. The unwelcome consequences of intruding sovereign power into the patent jurisdictions of foreign governments might be substantially avoided through a series of bilateral treaties, or preferably an international convention, specifying a procedure whereby each government would assign to the other or grant nonexclusive licenses with the right to sublicense other parties on all patents emerging within the other government's jurisdiction.

The handling of patents under the general plan as outlined would not, of course, constitute a restrictive device in the sense of control over markets and production; and if properly administered, it would avoid the inherent disadvantages of the "free" system.

4. *Socialized Industries and the Exchange of Technology.*

The prospects of these remedial and positive approaches to the international cartel problem in the field of technology should, insofar as possible, be assessed in the light of contemporary developments which have gone far to eliminate many of the assumptions of universal laissez faire that were realized in certain respects up to the World War and more imperfectly so thereafter. Specifically, diverse social trends in the

[27] This line of approach was embodied originally in S 1297, 79th Cong., 1st sess., a bill "to promote the progress of science and the useful arts to secure the national defense and for other purposes," and providing for the establishment of a national research foundation.

operation and control of industry in various foreign countries have opened a considerable gap between socialized and partly socialized economies, on the one hand, and predominantly free enterprise countries on the other hand, in respect of the development, protection, and exchange of technical information. This circumstance gives rise to a number of unsettled problems concerning the *modus operandi* of patents as the basis for the international exchange of technology.

For example, if technical research in socialized economies is conducted by or made available to the relevant public business enterprises, it is possible that the resulting international exchange of information will be considerably less free and extensive than in the past. On the one hand, a policy of nondisclosure abroad might be motivated on economic grounds by the prospect of improving the nation's gain from international trade. On the other hand, a policy of disclosure abroad might be forthcoming only under highly restrictive conditions in the event that competition exists for export markets in third countries.

A similar technological gap appears as between private firms in a given industry in one country and socialized establishments in the corresponding industry abroad. Two general cases may be distinguished: (1) the socialized industry abroad may be operating within a completely socialized economy, or (2) it may be operating within a system that recognizes and gives effect to private property rights in means of production, including technical information. In the first case, even though the socialized nation maintains a system of patent grants to foreigners, this system must differ greatly in economic and legal significance from the regime in private enterprise states. Presumably a patent cannot invest the foreign patentee with some or any rights to manufacture in the socialist country nor to exclude the government of that country from manufacture or importation. The grant of a socialist patent is, in effect, only the recognition of a novel invention, conveying to the inventor a presumptive right to reward within the discretion of the state. It confers no "bargaining power" in the sense of a right to withhold an invention from use by others. Consequently the more of his technology which is *undisclosed* and not patented either in his own country or abroad, the greater the bargaining power of the foreign inventor. To the extent that he has obtained patents in the socialist country, and to the extent that his undisclosed technology is complementary to these patents, the greater the reward obtainable for the use of the patents under a contract between the foreign inventor and the socialist state. While it is conceivable that the *quid pro quo* for such disclosures might be reciprocal disclosures by the contracting socialist industry, this matter is surrounded by a number of complexities and uncertainties.

In discussing the international technical agreement, it was indicated

above that technical collaboration presupposes mutual relations of a highly confidential and intimate nature. It is not certain, however, whether in practice many governments would wish to permit such reciprocal relations to be established between their producing agencies and private nationals in foreign countries. Furthermore, in order to gain maximum bargaining power and to protect itself against irreparable "leakage" of information transferred to foreign parties, the socialist government would be under strong inducement to patent abroad. While it could avoid the possibly unwelcome consequences of this situation by a firm policy of general licensing, as suggested in section 3, above, it would thereby lose in some measure its bargaining power.

Unresolved issues are also present in the case of technical relations between a "straight" private enterprise economy and a "mixed" economy. Moreover, they impinge both on the precepts of liberal commercial policy and the substantive matter of the completeness of the international exchange of technology. If publicly-owned industrial enterprises in a mixed economy are, to use Pigou's expression, merely "socialist islands" in a lake of capitalism, they may in the absence of proper safeguards make use of patents even more effectively than could a private firm to defeat the ends of liberal international trade policy. The socialized industry by virtue of its monopoly position as to domestic production is in a favorable position to reduce to its control all patents whether owned by domestic or foreign parties and thus to monopolize importation even though not invested with this power by legislation. It would also be in a position not only to take monopsonistic advantage of patentees in obtaining licenses or assignments but also to discriminate between foreign and domestic parties. Such discrimination could, of course, extend to systematic oppositions in the national patent office,[28] and the enforcement by the patent office of extreme standards of novelty with respect to inventions of particular concern to the industry in question. Moreover, since patents frequently cover processes or intermediate products useful in other industries, exclusive possession of such patents would further enhance the monopoly powers of the socialized industry.

Finally, since the socialized industry would be the sole domestic claimant and beneficiary of its government's research expenditures along certain lines, or might actually serve as the public research agency, its attitude toward foreign disclosure of research results and its policy toward patents in foreign countries might accordingly be affected. From the standpoint of its managers, it might seem imprudent to risk the possibilities of increased competition in export markets by a liberal disclosure policy; it might by the same token be shrewd business to play

[28] National patent systems, of course, differ as to this feature; however, many of the most important systems provide for opposition proceedings.

the strong hand with patent acquisitions abroad in order to obtain more favorable treatment from foreign enterprises, both as to disclosures of know-how and access to patent rights possessed by such foreign firms in their own or third countries. Over and against this possibility must be set the general foreign economic policy of the government in question, which might or might not prevail to the contrary.

The conclusions to be drawn from this discussion are not necessarily pessimistic. In the first place, the troublesome area is, to repeat, not all-inclusive. Scientific developments of a pure or background character are at the present time freely disseminated between countries, and measures for their still more complete interchange are in prospect under the Educational, Scientific, and Cultural Organization of the United Nations[29] and national measures to further its purposes.[30] International collaboration and exchange of technology in many applied fields such as agriculture is likewise relatively unimpeded at the present time and should be amenable without difficulty to substantial improvement. Moreover, even in the redoubtable field of industrial information there exists an unpatentable and nonconfidential margin that is freely disseminated for application to productive ends. These are good omens that should speed the difficult job of improving the interchange of industrial technology which as this study has endeavored to show is quite within the realm of possibility.

[29] For a description of the history of the present International Council of Scientific Unions see E. C. Brunner, "International Council of Scientific Unions," *Department of State Bulletin*, Sept. 9, 1945.

[30] See, e.g., H.R. 4368, 79th Cong., 1st sess., Oct. 11, 1945, a Bill "to extend and broaden the existing programs for the interchange of persons, knowledge, and skills between the people of the United States and the peoples of all countries."

DISCUSSION

Vincent W. Bladen: Dr. Haley discusses the joint proposals of the United States and Britain. It therefore seems appropriate for me to open by a reference to the nearest thing to an official statement of the policy of Canada. It is not really that. It is the advice given to the Cabinet by the Combines Commissioner, Mr. F. A. McGregor, as to what that policy should be. It is contained in his recent report, *Canada and International Cartels* (Ottawa, 1945). The reception of the report in Canada gives one good reason to believe that the "advice" meets with rather general approval. May I quote part of the final recommendation (pages 68–69):

> It is recommended that the government of Canada give its support to the establishment of an international office to deal with cartels. . . . It is not likely that there will be immediate acceptance by all countries of the specific proposals [i.e., the earlier proposals for the prohibition of particular cartel practices] put forward by the United States. . . . But there is no doubt that the time has come for joint international action in this field. The establishment of an international office to further negotiations among nations and to assist in the establishment of accepted principles for the control of cartels through discussion and compromise would seem to be one of the first steps in dealing with international cartel problems.

With this recommendation I am in complete agreement, and I would like next to make it clear that the hedging which I later indulge in does not mean that I am an advocate of cartels and restrictive agreements. Frankly I dislike and distrust monopoly in any form. But I am not too optimistic that national groups can be forced to compete, nor am I confident that unrestrained and unregulated competition in the world market would always provide a happy solution of the problems of all nations.

The Canadian report dealt exclusively with cartels. I have continually argued that private and public agreements should be considered together, and that many private agreements do not materially differ from agreements that would be made between "nationalized" industries in competing countries. Dr. Haley has dealt mainly with the conditions under which public, or, as they are called, "commodity" agreements might be acceptable. It is to this that I direct my attention, but what I have to say has some relevance also to cartel policy.

The first point that I want to make I must hinge, a little unfairly, on a phrase in Dr. Haley's paper. At one point he says: "Does the fact that an international commodity agreement has as its participants governments rather than private concerns necessarily insure the protection of the *public interest*?" (My italics.) It is on the use of the phrase "public interest" in this context that I want to comment. Even in national affairs there is some difficulty in defining the public interest; in international affairs I feel it is a definitely misleading concept. Because I fear that I shall be thought reactionary I hurry to take cover behind a liberal, Dr. Gunnar Myrdal. In his Godkin Lectures on Population at Harvard University there is this dictum: "To hope for a more universal collectivism than the national seems in the present stage of human history to be an illusion. No one, except in very thin intellectual strata, seems to have a working sentiment of indentification with humanity or even with Western culture." The context of this

dictum was very different, but I suggest it has important implications for the discussion of cartel policy and commodity agreement policy. It leads one to phrase discussion in terms of the reconciliation of public (i.e., national) interests rather than in terms of the public (i.e., world) interest. It leads one to emphasize effects on the regional or national distribution of income as well as effects on the aggregate income of the world. It leads one to a more sympathetic and realistic consideration of the noneconomic factors in national policy. It does not necessarily mean the acceptance of restrictive agreements public or private as good things, and the reason that I said it was unfair to hang these remarks on a phrase in Dr. Haley's paper is that my emphasis on the national interests does not lead to any serious reservations with reference to his paper as a whole. The desirability of establishing an investigating and conciliating body such as the ITO is not in question; the plea for constructive measures to render agreements unnecessary is if anything reinforced; but it should affect the spirit of the administration, and perhaps it contributes to a plea that the rules laid down for the ITO at the time of its foundation be not too rigid. It is my belief that it is out of the process of administration that sound drafting of legislation generally emerges.

In the Proposals there is one feature that is rather terrifying to an economist from one of the "dependent" economies. I refer specifically to the "second condition" required for any commodity agreement to be approved; viz., "that widespread unemployment *unrelated to general business conditions* has developed." (My italics.) I also refer to Dr. Haley's footnote where he notes that the emphasis is on abnormal commodity problems resulting from war, and not on stabilizing prices of raw materials or checking the decline of raw material prices in periods of general depression. Now this would be satisfactory and acceptable if one no longer feared depression; or if one felt confident that constructive programs of economic stabilization without restriction were likely to be successful; or if there were some provision for maintenance of income in the dependent economies that are politically independent as there is in the dependent regional economies within the nation state. But till there is more evidence of the probable success of positive programs of expansion and more readiness to be concerned with the world distribution of income, Canadians may well be frightened by this attitude. We do not believe in restriction as a remedy for depression; we want expansion and adaptation; but we are not happy at the prospect of giving up our right to self-protection till we are more sure that we do not need it and that others have similarly and sincerely disarmed. I am, however, very completely in agreement with Dr. Haley when he says "if efforts directed to the expansion of world incomes and employment should be even moderately successful, the occasions calling for restrictive intergovernmental agreements will be relatively few, and the facility with which related adjustment plans will be accepted may be relatively great." I have said in a Canadian pamphlet that we can only accept the negative policy of world antitrust as a part of a positive program of expansion and organized adjustment. It is good to find the cartel and commodity agreement policy

now made a part of a bigger program "for expansion of world trade and employment." Until the positive program is more certain of success I am afraid to accept too rigid a "self-denying ordinance" on protective restrictions.

A further reason for preferring to leave the ITO a rather free hand to work out its policies is based on the feeling that we should not legislate for the forties and fifties on the assumption that the pattern of the thirties sets our problems. New kinds of trading relationships are developing, especially various forms of state trading; new forms of domestic economic policy with important international implications are developing. Surely the important point is that made by Dr. Haley in his footnote where he refers to the "unfortunate assumption that no country (and least of all the United States) can be expected to change its domestic economic policy on the basis that this policy is a source of justifiable irritation to other countries while the same ends could be achieved in a way which would not be objectionable." It seems to me that the real advantage of the ITO is that it provides machinery for discussion of the international impact of national policies. To outlaw specific forms of international agreement may merely lead to the devising of new forms, as happened in your antitrust history. It may be argued that the provision for consulting before action is the essential part of the Bretton Woods Agreement; I am sure that it is of the ITO. Putting this another way, surely the agreement is intended to provide for reasonable rules of the game in international trade, not to force capitalist free enterprise on the world. And if it is a matter of making rules must one not insist that the conditions have so changed that they must be "new" rules, not just the old nineteenth century ones; and that the conditions are so fluid that the rules will have to be developed rather slowly out of administration?

FRITZ MACHLUP: The old Romans had a proverb which in English translation said that "what is permissible for Jupiter is not permissible for an ox." This authoritarian discrimination between the governing and governed is contrary to the American way. Believing in democratic equality we say instead that "what's sauce for the goose is sauce for the gander." Yet, present-day doctrine goes back to the classics when it says that what is evil and unlawful if called a "cartel between citizens" is good and permissible if called "commodity agreement between governments."

Agreements in restraint of international trade are always beneficial to some people and injurious to others. Economists usually agree that the aggregate benefit falls short of the aggregate injury; but the benefits are concentrated among fewer people and the injuries dispersed among the masses. When the beneficiaries of restriction are organized and can exert strong political pressure, economists have to make a difficult choice. *Idealists* continue to crusade against the restrictions. *Opportunists* become consultants to the pressure groups. The *majority* mumbles that we "must face reality" and that we "cannot swim against the stream." And a few hard-working *government economists* try to achieve a compromise and rationalize its provisions.

The compromise which was "developed by a Technical Staff within the Government of the United States in Preparation for an International Conference on Trade and Employment"[1] and which Professor Haley today analyzed for us so ably and lucidly, attempts to persuade the "Peoples of the World" that sauce for the goose is not sauce for the gander; at the same time, it tries hard to keep the supply of "sauce" or "gravy" for pressure groups to a minimum. The idea is that those international cartels which can muster political pressure and get the blessings of the governments may apply for a new charter as commodity agreements, but that it must be made rather hard for them to qualify for it. By leaving open the hope for cartelists that they will be able to qualify, we may reduce the resistance of the governments of many nations to join in an international convention curbing "restrictive business practices." On the other hand, the applicants for intergovernmental arrangements for the restriction of international trade in certain commodities shall have to pass a series of exacting tests and procedures. In brief, we neither shut the door, nor do we leave it wide open. Will many trade restrictionists be able to squeeze through the opening which the proposals provide? Are the tests and procedural hurdles difficult enough to keep out all but a handful of "overexpanded industries"? The answer will depend on the ITO and the way it applies the "principles" defined by the proposals.

Professor Haley's analysis is well considered and sound. In his discussion of the principles under which agricultural commodities may qualify for commodity agreements, he expresses three "cautions" which he wants the ITO to keep in mind: (1) He warns against impatience in the application of the "burdensome surplus" clause. Premature findings may be costly to consumers all over the world. (2) He warns against delays in applying the "widespread distress" clause. Professor Haley suggests that the ITO, instead of waiting until widespread distress has actually developed, should act sooner in order to prevent distress from developing. I am afraid, however, that a "threat of distress" clause would be so much abused as to render the test almost meaningless. (3) Professor Haley warns against acccepting the "burdensome surplus" as a qualifying condition where the surplus is chiefly the consequence of a domestic program of artificial price support.

In discussing the principles under which semimanufactured products may qualify for commodity agreements Professor Haley is more lenient than I should be inclined to be. I refer to the "widespread unemployment" clause. If an industry is really overexpanded, the emergence of unemployment in the industry may be the one and only method of economic adjustment. If the price of the product had been held at an artificially high level, Professor Haley correctly states, the lowering of the price through competitive forces will even increase employment throughout the world, causing unemployment only in the submarginal mines or plants. To ask the world to keep the price high by means of an intergovernmental commodity agreement, so that the "widespread unemployment" in the inefficient sectors of

[1] *Proposals for Expansion of World Trade and Employment* (Department of State Publication 2411, issued Dec. 6, 1945).

the industry may be avoided, is not only an uneconomic way of assisting the high-cost producers and the country in which they are located, but it is also a deception of the "Peoples of the World." If the ultimate consumers, say, of tin products were asked whether they were willing to make a donation to the Bolivian tin industry and its workers, they would probably answer with an emphatic "no." In my judgment, people should know when they are taxed and for what purposes. But apart from this deception, the hidden tax on the consumers of tin products which is levied as a result of commodity agreements is much higher than any excise tax would have to be in order to pay the most generous unemployment benefits to Bolivian miners after the tin price is allowed to come down to a competitive level.

I agree fully with Professor Haley's skepticism in regard to the representation of consuming countries in the negotiation of commodity agreements. The processors' and importers' interests are not the same as those of the unorganized and inarticulate ultimate consumers. Governments are not prone to battle for inarticulate interests while organized groups are lobbying, howling, and bribing.

The one exception that I take to Professor Haley's paper refers to his statement that "it would be unwise to interpret too strictly the provision that the program of adjustment should be 'believed adequate to insure substantial progress toward solution of the problem within the time limits of the agreement.' " In my judgment, this provision cannot be interpreted too strictly. The whole "adjustment program" is likely to be faked anyway. A mere promise that the "breathing spell" afforded by a commodity agreement will be used for effecting an "adjustment" of the industry is as worthless as all the thousands of "infant industry" assurances were when tariffs were made. We should insist that a most vigorous program of reallocation of resources must be formulated and adopted before the overexpanded industries are granted the "temporary" protection of intergovernmental commodity agreement.

Professor Hamilton's paper has a somewhat mysterious title but deals with a vital problem: the role in our society of the legal fiction of the corporation as an acting person. There can be no doubt that the acceptance of this fiction is of great relevance to the problem of international combines and cartels. Its significance, however, far transcends this problem; it bears on the degree of competition almost throughout the economy, on the concentration of economic and political power, and, indeed, on the development, functioning, and survival of a capitalistic economy. Nothing I could say would add to the wise and witty statements in the essay which Professor Hamilton has contributed to this meeting.

Dr. Terrill had a most difficult task. In his paper on "The International Exchange of Technology" he is breaking new ground, and we must not complain if the result is not as smooth as one would like to have it. In view of the mass of fertile problems which he has unearthed it would be unfair to point critically to the inevitable rough spots. I believe it will be more profitable if I paraphrase and enlarge on some of his statements.

As Dr. Terrill states, the findings of *scientific, basic* research are ordinarily

neither patentable nor kept secret, and they are well disseminated internationally. It is otherwise with the findings of ***industrial, applied*** research: they may be patented or secret or partly patented and partly secret; their international dissemination is patently unsatisfactory.

There are at least four principal methods of disseminating industrial technological information: (1) voluntary, free, and unrestricted (this is merely academic); (2) voluntary, but neither free of charge nor free of restrictions (this is the most practical method at present); (3) compulsory, with reasonable charges but without restrictions; (4) involuntary, through the leakage of secrets and through industrial espionage.

The first two methods each refer both to patented and unpatented information. The third method—compulsory—refers chiefly to patented information and can apply to supplementary know-how only imperfectly and with the aid of special devices. The fourth method—leakage—refers only to unpatented information.

Leakage of secrets is slow and imperfect. The main reason, as I see it, is this: it does not pay to organize espionage on a sufficiently large scale, because the secret know-how concerns usually only the application of a patented invention. Hence, even if you succeed in learning the know-how it will not do you much good, because the underlying patents will not expire for many years. Adequate industrial espionage, therefore, will be organized only when the underlying inventions do not enjoy protection under patents. Illustration: Prewar Japan, which has been relatively successful in getting technological information from other nations through this method. Countries which maintain a patent system cannot rely on adequate dissemination of secret technological information through leakage.

Since voluntary, free, and unrestricted dissemination of the findings of private industrial research cannot be expected save in rare instances, motivated by philanthropy or craziness, we have practically only the two methods: voluntary, with restrictions, and compulsory, without restrictions.

It is rather obvious that patents will be licensed voluntarily and know-how revealed in any substantial measure only under restrictive arrangements which protect the holder of patents and secrets from competition by his licensees. It would be naïve to chide patentees for such practices. But since Dr. Terrill is probably right when he says that the social disadvantages resulting from the restrictions may be greater than the social benefits from the dissemination of the technical knowledge, we must think of remedies.

Merely to forbid restrictive licensing will not be a remedy if it is true, as many experts say, that patentees will grant restricted licenses or none at all. Compulsory licensing then suggests itself as the logical next step. There are those who contend that foreign inventions will not be patented in countries which have compulsory licensing laws. This is stupid—because if an inventor should patent his invention in some countries but not in others, the invention as revealed in the patents would become freely and generally available in the countries in which the patent has not been taken out. The critics of compulsory licensing must go further, and they do, contending

that the compulsion to grant licenses without restrictions will cause people not to patent their inventions anywhere in the world. I cannot deny that some people may prefer to rely on secrecy, but I do not think it likely that this would be the general outcome. Rather than rely on secrecy it will still be more attractive to take out patents and grant unrestricted licenses with reasonable royalties.[2]

Whenever we in the United States ask the American parties to international patent agreements *why* they have accepted all these clauses restricting output, sales, exports, et cetera, they usually answer that this was the condition for getting the licenses; that the foreign patent holder would not license them unless they accepted the restrictions. Regardless of whether this excuse is true or untrue in most instances, the existence of compulsory licensing laws would make such excuses impossible. The American parties to patent contracts need not enter into restrictive agreements if they can always compel the issuance of unrestricted licenses from the foreign patentees.

I believe that an international convention to curb restrictive trade practices may be helpful in eliminating restrictive clauses from patent agreements. I must confess, however, that I do not expect too much from this sort of remedy. I am afraid that we cannot count on all other nations and on the ITO to attack restrictive licensing with the necessary vigor. I set my hope primarily on domestic patent reform. By adequate changes in our own patent laws we can much more effectively free the licensing of patents from restrictive features and secure the benefits of the international flow of technical knowledge without the disadvantages of international cartels.

ROBERT B. SCHWENGER: I find little to criticize in Professor Haley's constructive treatment of "The Relation Between Cartel Policy and Commodity Agreement Policy."

Professor Haley has considered whether, in the so-called "White Paper" containing "Proposals for Expansion of World Trade and Employment," the commodity-agreement rules are adequate to prevent the use of commodity agreements to circumvent cartel policy—or rather anticartel policy. He finds that they are adequate. I agree.

My question is whether they are not more than adequate, and I speak from the point of view of assuring economic peace among nations, and a relatively satisfactory level of world economic activity. Unless these rules are fairly broadly interpreted, there is a danger that they will prevent the consummation of commodity agreements urgently required in the general interest.

Actually, intergovernmental commodity agreements are very difficult to obtain, even without the body of rules contained in the White Paper.

[2] I do not underestimate the administrative and judicial difficulties involved in the application of compulsory licensing laws. The determination of "reasonable" royalties is one of the problems amenable only to solution by arbitrariness. But, in fact, the mere existence of compulsory licensing provisions would ordinarily be sufficient to secure voluntary agreements without restrictions, and decisions by courts or administrative bodies would be required only in exceptional cases.

The producing—that is, exporting—countries cannot easily be brought to agree and abide by their agreement. One of them will often break away to seek a deal with a market country to increase its share of the market. Few of them can restrict their domestic production of an agricultural commodity so as to prevent the accumulation of stocks.

Agreements have, in fact, been rather rare, except in times of severe depression. At such times, the evils the agreements should be calculated to prevent are in an advanced stage. It is not the commodity situations, but the whole economy that requires treatment; and the field of action left open to commodity agreements is limited in practice to restriction.

Under the rules laid down in the White Paper, the difficulties of negotiating agreements in time to prevent widespread distress may be even greater. Professor Haley hints at this possibility when he suggests that the burdensome surplus rule should be revised to depend not on the *existence* of widespread distress but on the *demonstrable possibility* that widespread distress will develop in the absence of governmental action. He also suggests that it would be unwise to interpret too strictly the rule that there must be a program of adjustment adequate to insure substantial progress toward solution of the problem within the time limits of the agreement. Let us consider some of the other rules from this point of view.

1. Consuming (i.e., importing) countries, under the rules, must have an equal voice with producing countries in the negotiation and operation of an agreement. But importing countries can rarely be brought to regard any specific agreement as being in their interest, except where they take the exporting countries' point of view because of their colonial interests, or in the increasingly rare case where they have not evolved methods of helping their domestic producers without helping foreign producers also. Otherwise they hesitate to enter an agreement that would require them to give up the advantage of obtaining their food and raw materials at depressed prices over considerable periods of time, even though it might result in increased world economic stability and a better foreign market for their manufactured-product exports. As it works out in negotiation, the consuming countries object at times of high prices that there is no surplus and, therefore, no need for a commodity agreement. Though a surplus may be developing, the consuming countries are unwilling to stabilize at the prevailing price or even at a lower price that they may still consider relatively high. Once the surplus develops and the price collapses, the consuming countries do not want a price above the going level. Their negotiators find it difficult to get political support for the view that a reasonable price must be assured foreign sellers at a time of surplus, in order to prevent depression in the producing countries that might have unfortunate repercussions on their own economy.

2. The rules require that there be determination that a burdensome surplus has developed, or is developing, in international trade and is accompanied by widespread distress to small producers. Professor Haley states that the existence of a domestic price-support program is not necessarily proof that a burdensome surplus exists. It should be pointed out, however,

that the existence of price-support programs in all of the principal producing countries (as is now the case for many of the basic commodities apt to be the proper subject of commodity agreements), not only holds off the distress without lessening the need for the agreement, but it leads the price-supporting governments to engage in economic warfare for their shares of the inadequate world market. Under such circumstances, I suggest that the prospect of intergovernmental economic conflict might well be considered as satisfying the conditions of the rule.

3. The rules require that it be determined, in the light of an investigation of the root causes of the problem, that measures for increasing the consumption of a commodity are unlikely to prevent the accumulation of excess supplies. The increase of consumption must, of course, be one of the major developments in the economic world, if our culture is to survive; but commodity agreements, designed primarily to breach the gap between a present period of surplus and a future period when demand may reach some standard of adequacy, should not be held up under this rule because of optimistic expectations for substantial consumption increases in a short time.

4. Then there is the rule requiring an adjustment program. Here I differ mildly with Professor Haley on a question of practicability, not of objective. He believes that a definite time schedule for such adjustment should be adopted even though he thinks it should not be required to contemplate complete solution of the problem within the five years to which agreements are limited. But this would bar the agreements most urgently needed. Where a problem requiring the "agreement treatment" is very difficult, and especially when it is rapidly becoming worse because of unilateral government treatment in the absence of an agreement, governments may not be able to commit themselves to a definite time schedule for the solution of the problem. Consider cotton at present. In many cases, the only permanent solution may lie outside the commodity itself, in the larger field of distribution that our general economists are wrestling with. There must be adequate purchasing power in the hands of potential consumers and a willingness to spend it for the things they need. It seems to me that, if an agreement gives reasonable promise within its time period of holding the problem within much smaller bounds than would be the case without the agreement, this rule should be considered as satisfied.

This raises the question of what duration is contemplated for commodity agreements. It is clear that the White Paper intends them to be temporary; but there are two interpretations of temporary. On the one hand, there is the view that the agreements must be primarily of an *emergency* nature, even for a commodity exhibiting the characteristics that make an agreement the appropriate means of dealing with it. On the other hand, there is the view that some commodities will require a more or less permanent international organization for their control.

I think I appreciate the arguments behind each of these points of view; and I feel that there is a happy medium toward which we must strive. The White Paper itself, as Professor Haley has pointed out, limits the agreements primarily to agricultural commodities and to a very few minerals. It

also limits them as to duration, except after review and in effect renegotiation. It may be that some commodities present a situation of chronic surplus in which, as one writer has put it, it will be necessary to have always available a "stand-by" organization ready to deal with the commodity whenever a serious surplus situation threatens.

Some economists have expressed the view to me that there is no valid basis for distinguishing between the markets for commodities of this type and the markets for other products, as far as the question of market control arrangements are concerned. I take it that the number who hold that view, except perhaps for some entirely utopian long run, is not very great, but I believe it worth pointing out again the distinctions that are so important for policy. Theodore W. Schultz in his book, *Agriculture in an Unstable Economy*, published by the Committee for Economic Development, puts the matter in a fresh and concise way in the following words: "Farming is fundamentally different from industrial work and business management. . . . Farm production as a whole is highly stable. Agriculture does not permit rapid changes in output up or down. *Farmers do not close down their farms when a depression strikes;* they continue to furnish food and other farm products to the nation. They are therefore not 'unemployed'; but they do not escape the burden of a depression." Farmers do not close down their farms when their price falls to depression levels. They keep on producing. As long as private entrepreneurs decide the volume of production in our economy, this distinction will be vital.

The matter may be approached in another way. Consider the market for railroad transportation or streetcar service. Is it not a market, in the same sense that the market for dyestuffs or steel is a market? Why then do we not criticize the permanent character of government intervention in the so-called "public utility" situations? Is it because of high-fixed costs, leading to the maintenance of production in spite of declining prices? But that is a characteristic of most farm production. Is it because the duplication of facilities would lead to cutthroat competition or natural surplus? Call it what you will, it is a characteristic of crop production as well. I suggest that this similarity be explored. One great *difference* between the two, I would like to point out, however, is that the market for most public utilities is a regional or a localized market, and the government controls called for have been possible without obtaining international agreement. In agriculture, the market is a world market. Hence, what is needed in many cases is world control of some sort by international agreement. Sometimes it need be only short-lived. Sometimes it may be required over an extended period. In either case, the rules, though not permitting disguised cartels, must be interpreted so as to permit commodity agreements where they are required in the general interest.

FLOYD L. VAUGHAN: Mr. Terrill presents an over-all picture of the international exchange of technology within the framework of present law. I shall discuss the economic aspects of the exchange of technology within the United States as well as between nations.

For several decades, patents have been brought together primarily for two reasons: first, to make available the latest technology; and, second, to accomplish what the Sherman Act forbids. Bringing together all the technology of a particular field has become more urgent as the number of patents has increased. The greater the number of patents on anything, the greater the conflict in their claims and the greater the likelihood of invalidity. All these patents taken together are like an old brier patch with much undergrowth, some branches dead and some alive, but all bristling with thorns that defy entrance. In this situation, no concern may know when others are infringing, and it may not know when it is infringing. Each enterprise takes out every possible patent; it tries to fortify itself against charges of infringement by being able to charge others with infringement. The net result is in effect, "I will not sue you for infringement if you will not sue me." This applies especially to patents on slight improvements and variations. However, in some instances, two or more concerns may have basic inventions on the same thing, or similar means of accomplishing a result. In any event, two or more concerns with many patents in the same field seek some way to avoid infringement, litigation, and confusion, and make possible their use of the latest and best technology.

The second objective in bringing together all patents in one field is to create a monopoly and restrain trade.

Attempts to attain these two objectives have been made through consolidations, pools, trusts, gentlemen's agreements, and community of interest.

An industrial monopoly, strong and legal, may be achieved by the outright ownership of all patents in a particular field. These patents may be obtained through consolidation of former competitors, from its employees and professional inventors, and by purchase from outside inventors.

In shoe machinery, mimeograph, camera and film, electrical, radio, chemical, and other industries, the control of patents has been an important factor in the dominance of one or a few companies.

The patent pool is the second principal way of exchanging technology, and it may be the means of creating monopoly and restraining trade. It is an arrangement by which former competitors partake of the privileges conferred by one or more patents according to some prearranged basis.

The number of business units in an industry that contribute patents to the pool may vary from one to all of them.

One common scheme for effecting the patent pool was to assign the patents to a dummy who in turn exercised control through licenses to the contributors. This was analogous to the old trust in which stockholders of various companies would assign their stock to a board of trustees who in turn exercised control by voting such stock.

There have been patent pools in the seeded raisin, rubber tire, threshing machine, liquid door check, enameled ware, motion picture, coaster brake, petroleum, glass container, and other industries.[1]

[1] For a description of economic and legal aspects of patent consolidations and pools, see Vaughan, *Economics of our Patent System.*

In some industries two or more concerns with patents agree not to bring interference proceedings or infringement suits against each other. This permits a united front against intruders. Conducive to such an understanding are intercorporate stockholding, common stockholders, and the interlocking of officers and directors.

The courts have followed no clear line in the interpretation of the foregoing schemes. In general, they have upheld the ownership of patents in a particular industry—in other words, a monopoly of individual monopolies and therefore the dominance of an industry. Whether such patents have been used or suppressed appears irrelevant. Some patent pools have been held legal and others illegal. Pooling or cross licensing of patents as between two or more former rivals, each permitting the other to use its patents, is within the law. Their licensing of former competitors, giving them the right to use their inventions upon payment of royalties, is within the law. This was clearly indicated in the gasoline cracking case.[2] If former competitors pool their patents on the basis of restrictions as to production, markets, and prices, the legality of such an action is doubtful. If one or more patentees license former competitors on the basis of such restrictions, as in the glass container industry, the arrangement is unlawful. In all situations, the general issue of course is whether patentees are merely exercising their legal privileges or violating the Sherman Act.

According to Mr. Terrill, the more important international agreements provide for the exchange of present and future patents, and also of confidential know-how. Their most common restrictions pertain to territories, sales, output, prices, and suits against validity of patents. These agreements are most important in electronics, illumination, dyestuff, explosives, pharmaceuticals, plastics, artificial fabrics, synthetic rubber, petroleum refining, synthetic fertilizer, metallic alloys, and aircraft equipment.

According to Mr. Terrill, since 1939 the Department of Justice has brought more than forty cases against international cartels and with few exceptions they have involved patents and technical agreements. Only one of them, however, has been decided.

Before discussing possible policies, one should review the common attitude of big business toward the exchange of technology and present the ideal objectives of a patent system.

Some business leaders contend that a contract for the exchange of technology is a private affair. A business agreement of little importance—for example, one between two antique collectors in London and New York—may be just another contract. But an exchange of patent rights between domestic concerns here and abroad is very different in its significance. Undue power and the freedom of the individual make a hazardous combination, and therefore require measures for the protection of the public. This is demonstrated in railways and public utilities and their regulation, and more recently in retail chains and the Robinson-Patman Act which limits their bargaining power.

[2] *Standard Oil Co. et al.* v. *U. S.*, 283 U. S. 163.

If economic power is based largely on government favors, the opposition to government regulation is obviously untenable. Certain business interests whose power rests largely upon patents, favor the exchange of technology but oppose so-called "government interference."

It is interesting to note that labor organizations whose power rests largely upon government favors take a similar stand for so-called "free enterprise." The leader of the mine workers, at the recent labor-management conference, had this to say about a resolution for wage raises without price increases: "I am opposed to labor's being required to bargain collectively within these limits. I want free enterprise and free collective bargaining." In opposing the president's plan for fact-finding boards, the head of the C.I.O. took a similar position. Likewise, large industrial concerns whose power rests largely upon patents seek an extension of their power but oppose government control. Incidentally, blocks of capital and labor that strive for power and resist regulation unwittingly invite the very domination which they deplore.

On what basis, if any, should the public permit the exchange of technology? In my opinion, any patent system should promote the following objectives: first, stimulation of inventions and the use of them; second, competition in making better products at less cost and selling them at lower prices; third, economic opportunity for individuals and small enterprises.

Let us now examine possible policies for dealing with the exchange of technology, especially of patented inventions.

One policy would be to encourage the exchange of technology and therefore world-wide monopolies and regulate their prices and services. Such a program of regulation would be more difficult than the present one for railways and utilities. Also the independent inventor would be handicapped in the sale of his patents unless the monopoly was required to purchase them at reasonable prices.

A second policy would be the one now in effect: the exchange of technology subject to existing laws and their interpretation. It is described in Mr. Terrill's paper. As already indicated, some of these exchanges are unlawful while others are lawful. The most recent example of an unlawful exchange is the *Titanium-Pigments* case. In this instance two dominant companies in an industry use patents as a barrier which would-be competitors cannot overcome. Neither one challenges the patents of the other, and the result apparently is a large number of invalid patents. Such economic power discourages independent inventors and prevents the general use of inventions. There is restraint of competition. There is economic dominance rather than opportunity.

This whole program of antitrust legislation and judicial interpretation, however, has obvious shortcomings. First, any action at all hinges upon administrative policy. Second, any action comes, if at all, after the exercise of monopoly and restraint of trade. Third, since one member ordinarily does not challenge the patents of the other, their industry becomes an old brier patch of deadwood and undergrowth and a few live branches which defies the would-be inventor or competitor. Such an industry may rely upon

a thorny front rather than research for basic inventions and improvements and thus technical advance may suffer. In other words, the exchange of technology that limits production, divides markets, and agrees upon prices presumably will be declared unlawful by the courts, but after certain damages have been done.

Suppose, however, that the patent pool is a mere interchange of patent privileges—an arrangement entirely within the law. Its ill effects, though less pronounced, would still be serious. The members of such a pool have in effect all the important patents in the industry. Experience shows that such a situation continues much longer than seventeen years. The members control both the environment for invention and the market for patents in their industry. They control the most favorable environment for conceiving improvements and alternative methods, which consists of production by their workers of the products which embody their inventions; observation of results by their professional inventors; and suggestions for purchasers and users. Further, such a pool provides only one market for the improvement patents of an independent inventor. The price paid for his patent would reflect not bargaining power between equals but rather the decision of one, two, or a few buyers. A pool whose membership is limited to dominant companies obviously restricts competition. It is like a closed shop in that only members participate in the latest and most complete technology. It is like a closed union in that other companies cannot join without permission.

A third policy, in effect, would be to regard the patents in each important industry as affected with a public interest and therefore subject to government regulation. Under this policy the useful and valid patents of each industry would be pooled, and licenses would be issued to all on a royalty basis. Some such agency as the Federal Trade Commission would administer the policy within the United States. Patents obviously worthless or irrelevant would not be included in the pool, and those deliberately suppressed would be canceled. Appropriate action would be brought to test the validity of questionable patents; perhaps the Patent Office would be required to defend the patents it has issued. More important, there should be stricter standards for the issue of patents in the future.

The useful and valid patents of each industry would be pooled, and any prospective manufacturer would be licensed to use the technology which they cover upon payment of royalties, perhaps according to his volume of output. These royalties in turn would be paid to patent owners in accordance with an appraisal of the relative importance of their inventions to the industry. Patents which do not reveal the know-how essential to practical application would be devalued accordingly.

There would be variations in administration according to circumstances. Appraisals of patents would be modified as some patents expire and as others are issued. If the patents of an industry cover alternative methods, a manufacturer might be licensed to use one rather than all of them. Also, a manufacturer in another industry might want a license under one or a few of these patents rather than all of them. Again, if improvements patents

could be clearly differentiated, the royalty might be determined for each one separately so that any licensee could take or leave any one or all of them.

Pooling patents of an industry, determining the royalty for all of them and the payment to each patent owner would give rise to many and endless difficulties. It would be impossible to appraise closely the relative merit or importance of each patent. But even approximations would be far better than the present distribution of rewards through litigation and through bargaining between the corporation and the individual inventor.

This policy—the pooling of patents—would be applied in any industry where necessary to prevent conflict and confusion in the use of the latest technology and to achieve active competition in prices.

The owners of patents in any industry—for example, in refining petroleum—would be given the opportunity to pool their patents, issue licenses to others, collect royalties, and divide the proceeds among themselves, provided, of course, their plan eliminates suppressed and invalid patents, encourages competition, and otherwise meets the approval of the government.

This plan would not provide any immunity or exemption from the antitrust laws of the United States. However, if properly administered, it would lessen the need for such laws in industries where patents are a major factor.

Under this policy, the relative importance of the patents of large corporations would decrease to the extent that a more certain reward would stimulate independent inventors. Another factor in this situation would be the extent to which universities pursue programs of research, not merely in pure science, but in its practical applications. Many states now lead the way in finding new resources, new processes, new products—in short, new means for industrial expansion.

This policy would provide royalties on the worth-while patents of independent inventors and of enterprises both small and large. Certainty of reward would arouse and sustain inventive activity more than the present uncertainty. Payment of royalty rather than litigation and other uncertainties would be the price of admission to an industry, and therefore would permit the effective and maximum use of inventions. It would create, restore, and increase competition in many lines of manufacture. It would open up new fields of economic activity to hundreds of enterprises. In other words, this policy would stimulate inventions and the use of them, foster competition, and provide economic opportunity.

Such a program for the United States alone would have an important bearing upon the international exchange of technology. With the exception of secrets, the latest inventions would be available here on a royalty basis. Products which embody such inventions would become available abroad where patent rights do not interfere, and to this extent provide everywhere the result of the interchange of technology. Restrictive agreements based on patents would be illegal in the United States and perhaps ineffective in foreign countries. Pooling patents and granting licenses, to repeat, would stimulate invention, competition, and manufacture. Consequently, this

country might lead the way to the adoption of a similar policy in other nations.

A similar program might be put into operation on a world basis. The machinery for this might be an International Trade Organization, as described by Mr. Terrill. Through negotiation pertinent patents of different nationals might be pooled and licenses be issued on a royalty basis that would permit the general manufacture and availability of the inventions which they cover. The fields in which the need for such a policy would be greatest would be the pharmaceuticals and other products closely related to public health, safety, and general welfare.

The vigorous administration of the antitrust laws of this country, especially in industries where patents are a dominant factor, may lead within limits to world-wide availability of technical information. This would supplement the program already outlined. Its possibilities are indicated in the recent decision of a district court in the *Titanium-Pigments* case. For the purpose of remedying the restrictions imposed on domestic and international trade, the court decreed the cancellation of the restrictive agreements and arrangements and also "opening of the defendants' existing patents, or patents applied for or obtained within five years, to nonexclusive licensing on a reasonable royalty basis, with the proviso that if an applicant for such licenses also has titanium patents, he must give a reciprocal license to the defendant companies. The defendants shall also disclose to the licensee, for a period of three years, all know-how used in connection with the patents in question."

In other words, after monopoly and restraint and other evils have been practiced some time, the court prescribes for a few years the pooling of patents of the industry, granting licenses on a reasonable royalty basis, revealing know-how, and restoring competition. Would not such a policy be better from the beginning rather than after the violation of the law and would it not be better on a permanent rather than a temporary basis?

Any disagreement with Mr. Terrill's paper is that present laws and their interpretation are inadequate as a proper basis for such exchange. The pooling of patents in each important industry and granting licenses to all upon payment of reasonable royalties is essential, first, to encourage inventions and their general use; second, to restore and increase competition; and, third, to provide economic opportunity in this and other countries.

THE PROPOSED PUBLICATION OF A PERIODIC REVIEW OF ECONOMICS

(The following precis of the round table discussion of the proposal of the Committee on the Development of Economic Thinking was prepared by Prof. J. J. Spengler and Dr. E. M. Burns. Dr. Burns served as Chairman of the round table session.)

EVELINE M. BURNS explained the purposes of the meeting and the background of the Committee on Development of Economic Thinking.

J. J. SPENGLER summarised the findings and proposals of the Committee concerning the publication of a periodic review of economics.[1]

EDWARD S. MASON pointed to certain difficulties that would attend efforts to publish an annual review of economics. Would such a review meet the needs of economists as well as systematic treatises and textbooks now do? Could high editorial standards be maintained? Would there be enough competent contributors available and willing to do review articles requiring six months' time for their preparation? He indicated that the editor and his board must be allowed great discretion in carrying out the project, howsoever it was finally conceived. He believed that it would be preferable to do a careful review of developments since 1939, to be gotten out in 1947, and, on the basis of this experience, to decide how thereafter to provide periodic reviews of branches of economics. He concluded:

> If this venture is to be undertaken it is of great importance that it get off to a good start. If a high standard could be established in the first volume, contributors to later volumes would rarely fail to attempt their best. It is possible that the opportunity afforded by the first volume to evaluate developments in a particular field over the last five years will be regarded by competent people as an unusual opportunity and that a high standard will be set. If so the prospects of subsequent volumes will be much improved. I believe that a high level of performance is so essential to the success of this venture that an elimination of contributions which do not meet proper standards is desirable, even if it means that the volume does not contain each year a complete coverage of the proposed subjects.

DONALD H. WALLACE indicated that while there is need for both a periodic review and for a review of developments in economics since 1939, a volume dealing with the latter time span should first be pushed to a conclusion. He noted that sufficient funds must be obtained from a foundation to make the project a success, and declared that economists have a responsibility to their public to participate wholeheartedly in this venture if called upon to do so. He suggested that the best type of author would be one with a sound and working acquaintance with several special fields, together with a sensitivity to the broader aspects of economic problems, and indicated where such authors might be found. He proposed a number of changes in the Committee's classification scheme, adding, however, that the editor could adapt the scheme and make it work. He advocated inclusion of matter on consensus. He believed that a periodic report on economic conditions should cover events and policy changes as well as essentially quantitative matter, but suggested that matter of this sort probably ought to be dealt with in a separate periodic volume. Let us get ahead with the job, he urged.

MORRIS A. COPELAND said the Committee prescribes for the ailment, too-much-to-read, a further dose of good reading matter. "The problem is,

[1] The full report of this Committee may be found at page 922 of this *Proceedings*.

how to make sure that [the proposed review] will be good enough to justify the average economist in reading this kind of secondary material instead of an equal volume of primary articles." He stressed also the elevation of the standards of performance by individual economists, saying that "one possible justification for [the proposed review] apart from its own goodness as reading matter" is the raising of standards and the emphasizing of research rather than publication. He further stated:

> Today it is not enough for an economist to produce an idea, and state it clearly. He must also sell his idea. There are too many economists as well as too much to read. Instead of becoming a profession economists have become a public. An idea not kept before this public, like an unadvertised trade name, is soon forgotten. The [proposed review] might do something to remedy this present emphasis on publication rather than on research. If [it] is read widely enough itself, and if in its selections among the outputs of economists it discriminates wisely enough and rigorously enough, it will come to be a sought-for honor to have one's work mentioned in [the proposed review]. There is thus in [it] the possibility of giving an incentive to quality of research rather than to quantity of publication. This possibility should definitely be made the most of.
>
> The question of quality of work thus has for [the proposed review] a dual aspect. There is need first to pass judgment on the outputs of economists, to select some of these as accomplishments deserving mention in the critical summaries, and to reject others as not worthy of mention. There is need, second, to consider the quality of the critical summaries themselves.

He made a number of proposals designed to improve the quality of the critical summaries. If a periodical review were determined upon—he preferred a quarterly to an annual—no author of a review of a field should repeat until two others had had a go at this field, and each consultant should be encouraged to file amendatory notes which might be printed and for which honoraria might be provided. Adherence to a fixed scheme of classification would be inadvisable. It would not be feasible, except at long (e.g., five-year) intervals, to conjoin a review of economic conditions with a review of economic thinking. Unless high standards for judging the outputs of economists and for determining the quota of items to be mentioned in each critical summary were established, the proposed review would not be sufficiently selective and critical and would not be worth undertaking.

Paul T. Homan favored doing the reconversion volume first and planning for continuing reviews of economics in light of experience with the reconversion volume. He indicated that a separate volume might well be devoted to periodic reviews of economic conditions, events, policy changes, etc., but independently of the project under consideration. He dwelt upon the very great editorial problems involved, upon the possible lack of competent contributors, and upon the need for more financial support than apparently was contemplated.

Fritz Machlup indicated that the tempo of development of branches of economics is not such as to permit a review every year or two; proposed that a first volume, to appear in 1947, review developments since 1939, and that thereafter volumes of reviews appear no more frequently than once in three years. He expressed the belief that it would be difficult to get enough competent contributors, and pointed to some of the opportunity costs of the project under consideration. He considered the classification scheme inadequate.

Joseph S. Davis strongly favored the project, saying that he preferred

seeing the reconversion volume done first. An annual review volume, not necessarily covering the complete field each year, should follow. He suggested that the proposal to provide an annual or a periodic factual review be explored separately. He suggested changes in the classification scheme; noted the great usefulness to economists and others of the review project; and expressed his conviction that there were many competent potential contributors available.

FRANK H. KNIGHT suggested possible changes in the classification system and additions to the content of the factual surveys, should they be included in the project. He added, however, that on classification there is much diversity of point of view, and that the actual developments in fields would have much to do with how they could best be summarized; therefore a fresh start would have to be made from year to year on the basis of the material on hand.

FREDERICK C. MILLS urged "that the chief emphasis of R.O.E. be on the rigorous and prompt testing of the organizing ideas, the varied hypotheses, the techniques, the quantitative estimates of economic magnitudes that are produced annually by persons concerning themselves with economic affairs." He stated:

> Our discipline suffers more than most, I believe, from the persistence of invalid and irrelevant concepts and from the tardy rejection of poor data. Discrimination that clears the decks and promptly exposes the useless, the misleading, and the irrelevant would speed the development of sound economics. . . . An annual review of economics that is in large part a summary and digest of economic thought would be of limited value. But a review that provides contemporary critical appraisal of the concepts, the substantive contributions, and the methodology of economics could be of very great service indeed.

E. A. GOLDENWEISER favored doing first a review volume covering the period since 1939 and the impact of the war on economic thinking, and considering later the matter of subsequent reviews. He did not favor including a survey of factual matter believing that other organizations were in a better position than the American Economic Association to provide this type of service.

DICKSON H. LEAVENS reviewed the experience of *Econometrica* with annual surveys of branches of economics and indicated some of the difficulties encountered. He believed a triennial review would have a much greater chance of success than an annual review.

ARYNESS J. WICKENS stated there is a very great need on part of administrators and practitioners of economics for review volumes of the sort contemplated, saying the American Economic Association is under obligation to provide such a review; suggested that the provision of a periodic factual economic survey be dealt with separately.

DEXTER M. KEEZER indicated areas in economics in which, despite the need for research, little or nothing is being done, while in other areas even piddling projects received attention. Clearly, there is need for a better organization of research. He suggested inclusion in the projected periodic review of a summary of projects in need of doing and of fields in need of exploration.

SEYMOUR E. HARRIS pointed to the many difficulties involved in getting

out a review of the sort contemplated; would do a first volume and thereafter review the several branches of economics less frequently than once a year; would not include a survey of economic conditions. He indicated that a full-time editor would be necessary, questioned the availability of sufficient competent contributors.

NORMAN S. BUCHANAN enumerated some of the difficulties which the getting out of an annual review would entail, but endorsed the objectives of the project. After the completion of a reconversion volume a project of periodic reviews might be integrated with the *American Economic Review*. Specifically, a program of critical summaries such as the Committee is proposing might be laid out, together with appropriate provisions for frequency of treatment, remuneration of authors, etc. When one or several such summaries had been completed, it could be printed and bound separately as a supplement to the *American Economic Review*.

ALBERT B. WOLFE stated that there is great need for the first reconversion volume and that it should be completed, but observed that it could be produced only if sufficient financial support were forthcoming. He did not favor combining a factual survey with the periodic review of economics.

JULES BACKMAN indicated some of the difficulties attendant upon getting out a review of economics; suggested that twenty or more rather than only two or three consultants be utilized in order that a truly representative opinion on economic developments might be obtained.

EDWARD H. CHAMBERLIN proposed reducing the number of categories included in the classification scheme and broadening their content as a means to greater flexibility.

EVELINE M. BURNS, summarizing the discussion, suggested that the following points appeared to represent the consensus of thinking: (1) That there was need for the type of survey which the Committee had in mind, in particular to meet the needs of economists who had lost touch with the literature and with economic developments during the war on account of military or government service. In addition such a conspectus of economic thinking is a continuing need on the part of administrators who more and more are concerned with economic problems, and on the part of all professional economists to offset the fragmentation of the science resulting from increasing specialization. (2) That the American Economic Association should undertake responsibility for such a volume or volumes. (3) That the project should concentrate in the first place upon a careful two-volume review of the developments in economics since 1939 to be published in 1947. (4) That while periodic reviews similar in general character to the first volume were desirable in principle, decisions concerning the appropriate intervals of issue and to some extent also the precise content, should be postponed for later consideration in the light of suggestions made at the meeting and of experience gained in the preparation and reception of the first issue. (5) That the possible preparation of a periodic survey of economic conditions, events, and policy changes (over and above such treatment as would be an inevitable and integral part of the articles in the first volumes) should be considered apart from the project described in (1) above. (6) That the

editorial problems, as well as those faced by the contributors, were more substantial than had been envisaged by the Committee and that even though in any case participation in the undertaking would have to appeal to the individual's sense of public or professional service, more adequate financial provision than the report contemplated would have to be made. This would probably involve a search for foundation supplementation of the Association funds.

Finally the Chairman appealed to all interested members of the Association to send in suggestions for content or contributors to the Chairman of the Committee, Joseph J. Spengler.

ECONOMIC RESEARCH

The papers in this section are concerned with the activities of the Committee on Research, of which S. E. Leland is Chairman.

DEVELOPMENTS CONCERNING THE NATIONAL RESEARCH FOUNDATION

By Edwin G. Nourse
Brookings Institution

I assume that all members of the Association know in a general way of the wartime work of the Office of Scientific Research and Development and that in July, 1945, Dr. Vannevar Bush, director of that office, submitted to the President a report of its work, embodying a "Program for Postwar Scientific Research." This document, entitled *Science, the Endless Frontier*, is commonly referred to as "The Bush Report." Its outlook was primarily that of military defense and permanent provision, through national legislation, for extensive research in the physical sciences and in medicine. To that end, it proposed the creation of a National Research Foundation and outlined its form of organization.

Following the publication of the Bush Report, a number of bills designed to carry its recommendations into effect were introduced in Congress, the principal measures known respectively as the Magnuson bill and the Kilgore bill. The chief differences between the two measures were that the former centered authority in a directing board and the latter in an executive director with an advisory board, and that the former was designed to limit the work of the Research Foundation to basic physical science and medicine, whereas the drafters of the Kilgore bill early accepted the principle that the biologic sciences should likewise be included.

Social scientists in Washington manifested deep concern over the narrowness of the outlook of the Bush Report and over the character of early drafts of proposed federal legislation. As a result of a series of impromptu meetings, they urged the Social Science Research Council to take leadership in seeing that the problems of the social sciences should be more adequately considered in whatever legislation might eventually emerge.

The Council had in fact taken active interest in the matter some months before the drafting of the bills or the presentation of the Bush Report and had set up a special committee under the chairmanship of Wesley C. Mitchell to study the problem and report to the Council. Members both of this committee and of the Council itself were somewhat apprehensive as to restraints upon the freedom of scientific inquiry which might result from a broad system of federal support and adminis-

tration of research. After intensive discussion of the report of the Mitchell committee at the fall meeting of the Council in September, 1945, however, there was substantial concensus (1) that private sources of funds would probably be disproportionately small in the postwar period as compared with the magnitude of research needs, and (2) that our chief concern, therefore, should be to see that the drafters of legislation and the Congressional committees considering such legislation should be as fully informed as possible as to needs in the social science fields, as to the nature of our research problems, and as to the administrative arrangements that would most effectively safeguard scientific standards of work. It was the majority view that adequate safeguards could be outlined in the legislation and developed in the subsequent administration of the act.

Both the Executive Director of the Social Science Research Council and the officers of the Association for the Advancement of Science used their good offices to see that discussion of these phases of the problem either by individual social scientists or by representatives of professional associations in the social science field should be included in the hearings on science legislation, which were held by the Senate Subcommittee on Military Affairs from October 8 to November 2, 1945.

These developments became the subject of discussion at an early meeting of the Research Committee of the American Economic Association and were brought by this Committee to the attention of the President of the Association. As a result, the President instructed me, as a member of that Committee resident in Washington and closely in touch with affairs of the Social Science Research Council, to take an active interest in this matter with a view to seeing that the economic aspects of the problem should be presented as adequately as possible to the framers of legislation.

The early days of the Senate Committee hearings were given over to distinguished natural scientists and others not identified with the social science field. Many of them recommended the inclusion of economic and social research in the proposed Foundation. On October 27, the entire session was devoted to a panel of social scientists, covering the fields of economics, political science, sociology, statistics, psychology, and anthropology. The senators present manifested a lively interest in the part which economic research should play in any national research program and also in the type of administrative setup which would seem best to promote the freedom of social science inquiry when supported by federal funds. In addition to his oral discussion, each member of the panel submitted a formal statement for the record. A copy of the statement filed by the representative of your Association is available.

The whole question of a National Research Foundation is still very

much alive at the present time, in spite of the activity of such pressing issues as atomic control and reconversion problems. In December a group of natural scientists set themselves up as a Committee in Support of the Bush Report and began a campaign to assure that from any National Research Foundation that might be set up, the social sciences should be excluded and that the executive board type of organization should be adopted. This was followed by the launching of a Committee on a National Research Foundation, which hopes to minimize controversial matters and secure harmonious co-operation on behalf of a well-rounded program of government support of "research in all fields of fundamental scientific inquiry relevant to national interest without arbitrary exclusion of any area." It argues that "although there is a serious division of opinion on the question whether administrative responsibility should be given to a governing board or to a single administrator, it should be possible to devise a plan of organization which will meet the major objections to either alternative."

A tabulation recently made of the testimony presented at the Hearings on Science Legislation (S. Subcommittee Print, 79th Congress, 1st session, December 6, 1945) indicates that of ninety-nine witnesses, nine recommended a separate agency for social science research, thirty-seven recommended its inclusion in the National Research Foundation, and eight made such a recommendation with certain reservations. After considering the testimony presented at the Committee hearings and consulting with many research scientists, Senator Kilgore, with the support of Senators Johnson (of Colorado), Pepper, Fulbright, and Saltonstall, introduced a new bill (S. 1720) which is a distinct improvement over the original bills. It would set up a National Science Foundation having eight divisions as follows: Mathematical and Physical Sciences, Biological Sciences, Social Sciences, Health and Medical Sciences, National Defense, Engineering and Technology, Scientific Personnel and Education, Publications and Information, each with a full-time director and staff and an outside advisory committee of scientists distinguished in the given field. The Foundation is to be directed by an administrator, a deputy administrator, and a National Science Board. The latter will include the chairman of the advisory committees of the several divisions and nine distinguished outside scientists, appointed by the President and ratified by the Senate. Research work supported by the Foundation may be conducted in government agencies (but in addition to, rather than in lieu of, their regular research activities). Or it may be conducted as a part of the work of universities, colleges, and experiment stations or of other research institutes or departments.

The Division of Scientific Personnel and Education will "award scholarships and fellowships to persons for scientific study or scientific

work at nonprofit institutions of higher education, or other institutions, selected by the recipient of such aid for such persons as the Administrator may determine . . . solely on the basis of aptitude, within the limits of such state quotas as may be established to insure an equitable selection of such persons from among the states."

Informed opinion seems to be that this bill or one of generally similar character will pass, though this is by no means a foregone conclusion. The point which I should like to drive in upon the consciousness of this Association is that its active interest in the matter should not be abated with the passage of such a bill. On the contrary, such passage should be the signal for continuous and searching study of and collaboration in the administration of the act. Any dangers that grow out of the scheme of federal support of scientific work will be greatly augmented by, if not directly chargeable to, slothfulness of the scientific professions generally and their professional associations in particular in seeing to it that slackness, favoritism, or special interest is not allowed to get a footing in the administration of the National Science Foundation. We must see to it that men of the highest standards are appointed to the various administrative positions and advisory boards, that the projects presented for support are of the most worthy character, and that, when grants are made, their execution is governed by the most rigorous standards of scholarship. In the matter of fellowships and scholarships, we must be alert to discover real talent wherever it may be located and be fully objective in our evaluation of candidates and in the writing of recommendations.

This Association, through its Research Committee or through a special committee, should be concerned to see that the needs of economic research are, at all appropriate times, presented with the utmost care, by most competent persons, and with nice discrimination as to other research areas and maintaining a proper balance of facilities and support among the different research agencies, academic, governmental, and commercial. If we are going to garner the potential benefits of government support of scientific work and protect it against discernible possibilities of abuse, individual scientists and scientific associations must be awake and active.

PRESERVATION OF WAR RECORDS

By Saul Nelson
Civilian Production Administration

Soon after the outbreak of the war in September, 1939, various groups, both inside and outside the federal government, began efforts to review the records of World War I agencies in order to draw what lessons could be derived from their experience and to avoid as far as possible a needless repetition of the same mistakes of organization and administration. With the fall of France and the organization of the Advisory Commission to the Council of National Defense in 1940, these attempts were, of course, intensified. Unfortunately, it soon became evident that it would be extremely difficult to lay hands upon adequate records of what had happened in 1917–19. There had apparently been little systematic effort either to preserve the records of the federal war agencies of that period or, perhaps more importantly, to organize them in such a way as to facilitate reference and analysis. Those that had been preserved had in many cases been scattered in haphazard fashion: some had finally come to rest in the National Archives, but others were in the Library at Stanford University, an exceptionally valuable group was discovered almost by accident in the White House garage, and still others could not be found at all.

The failure to maintain in readily accessible form the records of World War I unquestionably hampered federal agencies in their efforts to organize for the conflict just ended. At the same time it deprived research of an extremely valuable source of information in the field of social science generally and in economics, statistics, and public administration particularly.

The records of World War II accumulated by the federal government are, of course, far more embracing and comprehensive than those of World War I. They comprise invaluable information in almost every field in which the economist is interested. The material compiled by such agencies as the War Production Board, the Office of Price Administration, the National War Labor Board, and the War Food Administration, to mention just a few, include economic data on problems and in detail never before available, and which could not ordinarily be collected by the government in peacetime. It is clearly imperative that the mistakes of World War I be not repeated, that material of potential value be preserved as far as possible, and that it be organized in such a manner as to facilitate rather than hamper its future use both by the government and by outside agencies.

Early in September Mr. Corwin Edwards, acting on behalf of the Price Conference of the National Bureau of Economic Research, asked

me to survey the plans of the government agencies for the preservation of the records of this war. The problem at that time appeared particularly urgent because of the rapidity with which demobilization was progressing and the possibility that much valuable material might be lost in the process of liquidation.

I soon found that there had been at least one principal change in federal organization since the end of World War I which has altered the entire shape of the problem. I refer to the creation of the National Archives and the delegation of broad statutory authority to the Archivist with respect to the disposition of any federal records. No federal agency can at present dispose of its records without the specific approval both of the Archivist and of a special Congressional committee which has, however, uniformly accepted the Archivist's recommendations. This has rendered any hasty and indiscriminate destruction of records impossible.

The Archivist is, however, confronted with an exceedingly difficult problem in developing a rational basis for determining what is to be retained and what is to be discarded. The physical accumulation of records by the war agencies is staggering in volume, running into millions of cubic feet. The present Archives Building is already bulging. While it is hoped that an additional building can be acquired, it would obviously be an utter impossibility even to contemplate retaining all the huge mass of data that has been produced. In practice, moreover, indiscriminate preservation of a vast volume of records would be almost as unfortunate as their indiscriminate destruction. It would, in effect, be self-defeating because of the tremendous difficulty involved in finding the needle of useful material in the haystack of irrelevant and useless paper.

In order to arrive at a reasonable basis of selection, the Archives personnel has been working closely with the civilian war agencies for several years. Every effort has been made to improve and centralize records management in each agency. Prior to deciding what is worth keeping and what should be destroyed, it is, of course, essential to find out what has actually been collected; that is, to compile a fairly detailed inventory of the records on hand. This part of the job has proceeded with somewhat varying effectiveness in different agencies, depending upon the size of the agency, the effectiveness of its internal administration, and, to a considerable extent, the degree of apparent urgency in terms of liquidation deadlines. For most of the smaller war agencies, the job has been completed or is well on its way to completion. Among the larger agencies, the job in the War Production Board is far along, whereas in the OPA it has until recently been lagging, although considerable pressure is now being exerted to accelerate it. In a few agencies

of major importance, such as the Foreign Economic Administration and the war activities of the Reconstruction Finance Corporation, comparatively little progress seems to have been made to date.

Once the inventory is completed, the job of selection begins. Some choices are fairly obvious. For example, it is accepted policy that such documents as formal economic and statistical reports, committee minutes, policy reports and memoranda in the files of the principal agency executives, etc., should be kept. Clearly useless material such as rough drafts, certain kinds of what are called "housekeeping" records, and the like can be freely destroyed. There is, however, a large middle ground in which the selection is considerably more difficult. The toughest choices relate to material which may have some potential future value either for the government or for outside use but whose sheer volume prohibits mass retention. This is particularly true of field data such as that accumulated by the local OPA offices which simply cannot be kept in their entirety.

I have had the opportunity of reviewing the situation for almost all the war agencies with the Archives personnel. While the problems of no two agencies are fully alike, they show enough similarity to permit summarizing them in terms of a few type situations.

1. First are a few small agencies, such as the Office of Economic Stabilization, whose total records are only several hundred cubic feet. These will be kept virtually in full.

2. Second are agencies intermediate in size, such as the War Labor Board, the Office of Defense Transportation, and the Petroleum Administration for War. Here, while it is still possible to retain most of the material of potential value, some degree of selection becomes essential. In the case of the War Labor Board, for example, while the Washington records are limited in volume, there is a large mass of paper accumulated in the various field offices, the bulk of which relates to the so-called "voluntary adjustment" cases in which the employer requested permission to increase wage rates without any dispute being involved. It is planned to retain virtually all the central office files of the War Labor Board, as well as all the field office material dealing with disputed cases. In addition, certain classes of voluntary wage adjustment cases, such as those dealing with wage brackets, will also be kept in full. For the remaining voluntary adjustment cases which, as I have said, represent the bulk of the volume, it is planned to retain a 10 per cent sample.

3. Next we come to the major agencies, such as WPB, OPA, and FEA. Here standards for retention necessarily become more rigid. Volume must be brought down to manageable proportions, even at the risk of losing some useful material. This means that disposal plans must be

worked out with great care to achieve the best compromise between conflicting considerations of physical limitation and future potential value.

In the case of the WPB, the program is well advanced. In the first place, there is no doubt that all major policy documents, statistical and economic reports, etc., will be retained. The Civilian Production Administration, which inherited the working records of WPB, is at present engaged in the task of reorganizing much of this material into what are called "policy documentation" files. Thus all the relevant material dealing with, say, the aluminum expansion program will be pulled together from the files of all the offices which had a hand in the job so that a fairly complete story can be obtained from a single set of documents. Needless to say, this sort of operation greatly enhances the future value of these records.

The toughest problem with respect to WPB relates to the mass of paper, largely statistical in character, accumulated in the course of administering the hundreds of individual orders which WPB had issued. This includes application forms, reports of production, sales, and deliveries, capacity, material requirements, manpower needs, and the like. The summary tabulations developed from these individual applications and reports will, in general, be kept, but it is impractical to consider turning over all the mass of individual forms to the Archives.

Instead, the War Production Board handled this problem on the following basis. It first prepared a detailed summary of all the forms which had been utilized. It then called in all the other government statistical and economic agencies which might have an interest in this material to see whether any part of it should properly be transferred to their custody. As a result, almost all the recurrent forms (about 1,500 separate series in all) will be transferred, mostly to Census, but also to other agencies such as the Bureau of Mines, the Bureau of Labor Statistics, the Tariff Commission, etc.

After these discussions were completed, the Civilian Production Administration established a search room during the last six weeks of 1945 in which copies of all the statistical forms were made available for inspection by any interested outside groups. The existence of this search room was widely publicized and all interested parties were invited to examine the forms to see whether they contained any information which would be of use to them. Of course it was not possible to make reports submitted by individual concerns available to any nongovernmental groups, but a system was established whereby special summary tabulations could be prepared upon request, subject, where necessary, to appropriate arrangements for defraying the cost involved.

This search room was patronized to an extent exceeding expectations.

It had about 500 visitors during its existence and received 1,650 requests for data from industry, state governments, trade associations, etc. The bulk of the requests received appear to have been reasonable and arrangements are being worked out to supply the information wanted.

The Civilian Production Administration is also planning to publish a detailed catalogue describing all the records which will be transferred and the agencies acquiring custody. This should greatly facilitate future reference and use.

Plans with respect to the Office of Price Administration are not as far advanced, although it is now expected that the process of preparing a records inventory will be completed very shortly. It is expected that a general procedure similar to that for the War Production Board will be evolved. The OPA problem, unfortunately, is further complicated by the legal restrictions upon the availability of the data collected from business firms, as well as by the extremely large volume of material in the regional, field, and local offices.

4. There is one other fairly common type of situation which should be mentioned. In a considerable number of cases a war agency was set up within a permanent federal department or was transferred to one or more departments during the liquidation process. For example, the War Food Administration was an integral part of the Department of Agriculture, the Solid Fuels Administration is under the Department of Interior, the Foreign Economic Administration has been split among three departments—Commerce, State, and Agriculture—and the War Shipping Administration represented an extension of the activities of the Maritime Commission. As the war activities of these agencies taper off their records will in general fall under the custody of the respective departments of which they are a part. This postpones, although it does not in the long run eliminate, the problem of records disposal.

In summary, as far as the physical preservation of records goes, I am convinced that there is every reasonable assurance that little material of real potential future value will be lost. The process of liquidating the war agencies is, in general, proceeding in a reasonably orderly fashion, and we are not repeating the mistakes of the last war in which work was discontinued at virtually twenty-four hours' notice after the Armistice and records left in inextricable confusion. We can be confident at least that documents on all important policy decisions will be safely preserved for future reference. However, this does not and cannot mean that all material of potential value will be preserved nor that the material which is kept will always be so organized as to facilitate future reference and use.

From the point of view of the economist and the statistician, the most valuable material collected by the war agencies is probably the detailed

statistical records: the reports of production, shipments, prices, costs, margins, wages, employment, etc., which were obtained from American industry and public in volume and in detail never before approached. Summary tabulations of these data will in general be preserved and be available to cast light upon many issues of importance. It should be emphasized, however, that these summary tabulations were usually prepared to meet specific administrative needs and that they often fail to show breakdowns or relationships in which economists may have especial interest. Consequently, it is highly desirable that a good proportion of these basic records be preserved, and that arrangements be made to permit their effective utilization for appropriate research projects.

This will involve both a careful plan for selective retention and some method for coping with the problem raised by the restricted classification of the bulk of these reports. I believe that we have every reason to hope that a fairly satisfactory retention program can and will be worked out, in some cases by the use of sampling techniques similar to those I described in connection with the National War Labor Board, and in part by the transfer of records to other agencies in accordance with the plan adopted by the War Production Board. The question of availability presents difficulties, particularly in connection with OPA data, but there are ways in which this issue also can be met

At this stage I should like to yield to Mr. Rowe who will outline some of the results of his investigations in this field, with particular reference to the problems of the use and availability of war records.

USE OF WARTIME GOVERNMENT RECORDS IN ECONOMIC RESEARCH

By HAROLD B. ROWE
Brookings Institution

The value of wartime government records retained under the procedures discussed by Mr. Nelson will depend upon the extent and effectiveness of their use. Of course records are not retained solely for research use, although recognition of the importance of this purpose is contemplated under the government's system of record management. Administrative and legal purposes receive first consideration. But for the research economist, wartime records will have value to the extent that they contain information which can be utilized in the advancement of economic research.

My brief exploratory inquiry in behalf of the Research Committee of the American Economic Association so far suggests that some people may exaggerate while at the same time others underestimate the value of these records. It is easy to assume that the records accumulated during the war constitute a vast store of material, perhaps largely processed, from which the researcher can obtain the information he needs for the study of many problems. An attempt to utilize government records for research purposes is likely to prove disappointing, however, to those who start with such an assumption. Oftentimes records may not contain the information sought, or at least it may be necessary to work through a large mass of documents to obtain a limited amount of usable information. Instances where this source will provide all the information required for the conduct of particular studies may prove to be the exception rather than the rule.

On the other hand, the potential value of these records easily can be underestimated. While the information they contain has been collected for administrative rather than research purposes and therefore will seldom conform to optimum research specifications, many of these records can have real value in the study of a variety of topics. Effective utilization will require careful planning of studies in the light of the values and limitations of the records as they exist. A researcher should not commit himself to a project which must depend upon material from this source until he has ascertained that the necessary information really can be obtained, and it probably never will be practicable to exploit all the material preserved. Nevertheless, it seems to me that in many instances the wartime records can yield useful material in connection with the study of a number of significant problems. But their value will have to be determined in the planning of particular studies, and results cannot be assured in advance except, of course, as the re-

searcher may already have intimate knowledge of the records he expects to use.

Some Purposes for Which Records May Be Used

Perhaps the most obvious use of wartime government records is in connection with research of a historical character. Historians are, of course, among the largest "consumers" of such material, but historical analysis also is important in the study of economic problems.

Another purpose for which war records may be employed is that of revising, extending, or filling gaps in informational material having general rather than specific usefulness. One of the major uses which Mr. Nelson and I have so far identified for some of the applications, compliance reports, and similar items received from individual industries and firms may be in extending mailing lists and otherwise adding to census data.

A third purpose for which government records may provide material is the analysis and appraisal of specific wartime economic programs and the results achieved. What were the results of particular controls? How did these controls operate? What were their shortcomings? And how differently should they be undertaken next time? Moreover, the extensive systems of economic control developed during the war may be studied, not with the limited objective of appraising their accomplishments and usefulness for similar purposes in future wars, but rather with the objective of adding to our knowledge of the possibilities of control for ends perhaps quite different from those of wartime. During the war, controls of a far more comprehensive character than had previously ever been contemplated in this country were undertaken. In a sense, therefore, the war provided a period of extensive experimentation with many types of economic control. Analysis of these experiments should shed much light upon the possibilities of designing feasible controls for the accomplishment of specific objectives in peacetime and prediction of the results to be obtained.

The detailed control over the production, distribution, and use of materials and over nearly all prices which was undertaken made it necessary for executives in war agencies such as WPB and OPA to study the operation of particular segments of the economy with a degree of intensity never previously attempted. This experience must have revealed much that would be of value to economists, and it may be supposed that some of this has been preserved in the written material retained in the files. Is it not possible that study of such documents, supplemented by interviews with persons who had held key positions in the agencies, might yield a number of worth-while leads for the use of commodity and industry data collected during the war in studies that would extend our knowledge regarding the organization and functioning of the

economy? It has been suggested that data furnished to agencies such as WPB and OPA may contain enough useful information regarding the organization of particular industries to permit further analyses of capacity, size of firms, location, combinations of products, distributive outlets, material requirements, and similar characteristics. To cite a couple of examples from my own experience, I believe that data collected in connection with the food rationing programs might be used to construct a more complete picture of distribution for several major food items than had been previously obtainable. I understand that such material for meat already has been tabulated by OPA, although I have not yet seen the result. Moreover, I have felt that a well-conceived study of consumers' behavior under point rationing could yield significant knowledge of consumer preferences and the characteristics of consumer demand. Of course, such studies would have to be so planned as to permit utilization of the data as they exist, but it has seemed to me this might be possible. As an additional example, I wonder if data which have been collected by OPA on distribution costs and margins might be used to obtain an improved understanding of cost-price relationships in the distribution of consumer goods.

The last broad type of purpose I shall mention to illustrate possible uses relates to analyses concerned with the internal organization, policies, practices, costs, prices, and financial outcome for individual firms. In the extremely large volume of detailed information filed with the various agencies of the government by the members of many industries, there must be a great deal that would be useful in this type of investigation. A problem in this use of the records arises from the fact that, if a maximum utilization of the material is to be accomplished, it may be necessary to obtain information furnished by specific firms to perhaps a number of agencies. This of course would multiply the difficulties of access and use.

Usefulness Depends Upon Type and Condition

The title "wartime government records" covers material produced and held by a large number of government agencies concerned with a wide variety of wartime activities. Moreover, the records of any one agency include materials of many types. It is not possible to proceed very far with a discussion of their value by considering these records in the aggregate. What we are concerned with is the utilization of *some* records which may have value for specific purposes.

The so-called "administrative housekeeping" records relating to budgets and appropriations, personnel, space requirements, and internal administrative procedures contain very little material that is useful for economic research and hence are of slight interest in this discussion.

About the same thing can be said for most of the correspondence files, although some of these may yield information on specific points—for example, the character of complaints and their sources. Of much more possible importance are administrative records sometimes designated as "policy material." This heading would cover most of the materials relating to the establishment of the agency, including information regarding such alternative plans as may have been considered; directives, policy determinations, and interpretations defining the scope of its work; and the wide variety of documents bearing upon the proposals advanced, arguments considered, and decisions reached with respect to programs and operations of the agency.

Another type of records will include applications for allocations of materials, priorities, rationing allotments, export licenses, as well as claims for subsidies and the many types of reports and compliance documents through which operation is effected. Particular series of records of this type may or may not have value as source material, depending upon the character of the operation in connection with which they are produced and the kind of information collected in relation to the needs of specific studies. For example, probably little useful research material is to be obtained from the FEA files of export license applications. On the other hand, applications and reports to OPA and WPB may yield valuable data provided the means can be found for obtaining the right tabulations and otherwise putting the data into usable form.

Another type of record material to be found in the files of some agencies is that assembled as an informational basis for decisions with respect to policies and operations. Such material will include compilations of available data on special subjects as well as surveys or special investigations undertaken by the agency. Obviously, the value of such materials depends upon the character of the subjects which adiminstrative requirements caused to be investigated and upon the adequacy or the quality of the study.

The value of particular records and the purposes for which they may be used depend also upon the circumstances under which they were produced. Typically, the work of war agencies was begun under tremendous pressure for speed so that there was all too little time to develop organization plans or select and train staff to carry out a systematic operation. Important decisions were reached in hastily convened conferences and oftentimes the alternatives considered and the basis for decisions either were not written down or this was done so incompletely as to provide a quite inadequate record. Moreover, files and adequate systems of reports and operating records tend to be developed over a period of time. Such circumstances affected the completeness, reliability, and individual usefulness of records produced in connection with particular programs.

This problem probably was most difficult for the new emergency agencies, particularly those which underwent a succession of reorganizations. But even old-line agencies encountered great difficulty in achieving orderly management of wartime functions.

Accessibility

A major problem in utilizing war records for research purposes arises with respect to their accessibility. Records may be classified under varying degrees of restriction. The requirements of military security caused the classification of many records during the war. Other material is restricted, oftentimes by legislative prohibitions, because it relates to the internal affairs of individual firms. Restriction also results from the fact that at times the operation of government agencies would be hampered by the premature release of information, and sometimes it is desirable to protect administrative agencies from an overlarge number of inquiries, especially when it appears that these may include a number which are somewhat irresponsible. As an example of this, OPA rationing materials in local boards were placed under close restriction, largely for the purpose of protecting the boards from the burden of deciding upon the merits of individual requests for access. For the most part, however, the necessity for such restriction on administrative grounds is only temporary.

Now that the war is over, many records restricted for security and administrative reasons are being declassified. It is to be expected that this process will continue, although at by no means uniform rates for records of the various agencies. For example, it appears to be much easier to obtain access for purposes of research to material for which the Navy is responsible than it is to that controlled by the Army. It may be safely assumed that restrictions will continue to be placed upon material relating to the business affairs of individuals and firms. While this restriction may at times hamper, it does not in my judgment necessarily prohibit the effective utilization of these records. Even in the case of OPA, which is especially restricted by the provisions of legislation under which it operates, I am of the opinion that ways can be found to provide considerable opportunity for responsible use of records in research where information regarding individual firms will not be revealed in the published results.

From the standpoint of research workers, however, the problem of accessibility is broader than that of restriction under the classification regulations. It relates also to the location of the records, the manner in which they are stored, the way it is classified in the files, and the availability of adequate inventory descriptions, indexes, or catalogues which make it possible to locate the material required. Unfortunately, the

materials needed for a particular purpose may be scattered very widely. Some may be contained in memoranda and summaries of special studies where it would be relatively accessible if only there were some means of identifying the right files in advance. Others, however, may be buried in extensive files of documents produced by the agency, submitted to the government by industries or individual firms, or contained in the records of the industry and advisory committee meetings. Moreover, disposition of the records is not without importance in this connection. Records selected for retention may be kept in the active files of a continuing agency, transferred to a successor along with the function to which they relate, or turned over to Archives. Ordinarily it is not easy for the researcher to work with materials retained in the active files of an operating agency. Moreover, when a war agency is liquidated by transferring its functions to several successor agencies, its records tend to be correspondingly dispersed. In such cases, a research worker who seeks to use the materials may have to trace them to a number of destinations in the files of successor agencies.

These problems of accessibility are such as to limit the prospects for small-scale utilization of some types of record material. It would seem, however, they might be met in part where the right studies could be undertaken on a large scale. For example, it may be impracticable to grant a number of individual researchers access for the tabulation of data from application or report forms in a particular series. But if these data have sufficient usefulness, it might be entirely possible to have them drawn off as a joint project, perhaps by arranging for the Census Bureau or other appropriate agency to make the required tabulations.

Services of the National Archives

Perhaps the optimum situation from the standpoint of research workers is that in which wartime records selected for retention are transferred to the National Archives. Of course the problem of accessibility still exists with respect to such records, but it does not appear to be as serious. So far as classification restrictions are concerned, the records of temporary agencies whose functions are not transferred to successor agencies are under the jurisdiction of Archives, which endeavors to permit access for responsible research use. Space and cost considerations are causing several permanent departments or offices to turn their records over to Archives much earlier than has been the practice in the past. For example, the Agriculture and Navy Departments transfer records when they are five years old. Usually such records are transferred in two classes: those which are wholly unrestricted and can be used by anyone having a serious purpose, and those which can be examined only with

the permission of the original agency. There is a growing tendency, however, which I personally feel should be encouraged, for a number of agencies to delegate to Archives the responsibility for determining who may have access to records in this latter class on the basis of the purpose for which they are to be used. In any case it is easier to obtain prompt clearance from the original agency for a request made through the Archives channels.

Other problems of accessibility also are reduced in view of the functions performed by Archives. In the first place emphasis is placed upon description of a character which facilitates use of the record material. Record group registrations followed by preliminary check lists are prepared for internal use. As resources permit and the needs of researchers become known, however, Archives officials hope that this work can be carried to the point of issuing printed inventories of the material held. Of equal or perhaps greater importance for the present is the fact that the research worker who applies for and obtains admission to the central and divisional search rooms will have available the assistance of attendants who, because of extensive experience with particular record series, sometimes may be more familiar with the records than were the original producing agencies.

In order to utilize these services, it is necessary for the researcher to work in the Archives building. About all that can be undertaken through correspondence is the verification of particular points, usually for reference purposes. However, research workers are encouraged to write to Archives inquiring about the availability of usable materials, provided projects and needs are clearly stated. Moreover, working space, typewriters, and very modern facilities for photographic reproduction of nonrestricted materials are maintained. For example, microfilm copies can be obtained at a cost of about a cent and a half per page.

Officials of the National Archives advise me that up to the present its facilities have not been extensively used by economists, perhaps because the government records previously acquired have not contained large amounts of economic material. In view of the possible value of the wartime materials now being acquired, however, and in view of the kinds of service which Archives is attempting to furnish, it seems to me that economists might well become more familiar with these facilities in the future.

In summary, I suggest:

1. Economists should not overlook wartime government records as a potential source of valuable research material. These records have many important limitations, will be difficult and oftentimes expensive to utilize, and mostly will contribute to the conduct of a project rather

than supply all the information needed. Nevertheless, careful exploration while studies are being planned may frequently enable the economist to obtain material of value.

2. Economists should pass up no opportunity to become more familiar with the government records which may have application in their fields of interest. As such familiarity is acquired, the most constructive ideas regarding potential usefulness of the material will develop.

3. As ideas are crystallized with respect to specific studies or types of research in which the particular records could be utilized, the economist should see that these ideas are made known to the government, particularly to National Archives, where services are adjusted to the needs of research workers as far as these needs are known and resources permit.

4. Consideration should be given to the results that might be obtained by co-operatively planning types of research in which these records would be expected to have the greatest value. Such planning might suggest topics for investigation by individuals utilizing particular series of records. It might also indicate the desirability of certain projects to be undertaken jointly or co-operatively by a number of agencies. Again, it might lead to the recommendation of specific projects to be undertaken by government agencies or large research foundations who would be able to conduct work on a scale beyond the reach of most research staffs. In any attempts at such planning, the experience of economists who have had extensive experience with various phases of the wartime activity should be particularly helpful.

ECONOMIC OPINION AND PUBLIC POLICY

REPORT OF *AD HOC* COMMITTEE ON MONETARY POLICY

By JAMES WASHINGTON BELL
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This is a report on the questionnaire *method* of focusing the opinion of members on matters of economic policy. We are concerned here with the procedure of drafting questions, selecting respondents, analyzing the results of the poll with respect to agreement and disagreement, and with the interpretations of the significance of the results so far as method is concerned. An analysis of the results in the light of the substantive problems suggested by the questions and the possible solutions of these problems constitute the subject matter of another session of these meetings; namely, the round table on Domestic and International Monetary Policies.

The "monetary policy" project grew out of a previous experiment on the "Function of Government in the Postwar American Economy," which was carried on in connection with last year's annual program (see *Proceedings*, May, 1945, pages 422–447). The questionnaire or poll method of discovering whether or not economists think alike on public issues was resorted to by that Committee as a counterpart to the consulting panel report method followed by the (E. J. Working) Committee on Agricultural Price Supports. Both experiments were efforts made to determine the feasibility of formulating collective judgments as a basis for influencing public opinion. We are concerned with methods of formulating collective opinion. The matter of making such informed opinion effective is a separate question. (See Report by the Subcommittee on Consensus in this same volume.)

The results of the "function of government" experiment were not altogether convincing, though all agree that progress has been made in developing a useful technique. We found a relatively high correlation of agreement among the economists polled, and a lack of agreement appeared where we had expected it to appear, but the sampling of questions touched only narrow aspects here and there of a field altogether too broad to detect essential differences. The questions were not readily amenable to Yes-No answers, and they could not be broken down sufficiently to account for all of the qualifications and reservations needed to come to grips with *real* issues. An analysis of the comments made by the respondents produced much evidence on this score. The implications of the questions were not always obvious nor even apparent to all

respondents. This was made evident by the inconsistencies in many answers.

Some critics of this report asserted that the answers to the questions reflected emotional or political proclivities rather than closely reasoned results of careful study and training; that the answers were not particularly typical of economists' thought, since the same results might have been obtained from other educated groups. They maintained that the answers of the economists polled would in all likelihood have reflected a different "atmosphere of the time" had the same questions been asked ten or fifteen years ago. Another objection concerned the sample of economists polled. It was admitted that the panel consisted of well-trained and well-informed groups (past officers; Group 10 of our membership classification); but in this day of specialization, when economists specialize in narrow fields, they are perhaps no better qualified to answer the broad, general questions on functions of government than are any other intelligent groups. This criticism has weight, but it may be an indictment of the question rather than of the method.

A supplementary questionnaire on gold and paper standards, addressed to monetary economists, produced more concrete results since the issues were more specific and clearly drawn. It was planned partly as a result of the poll then being taken on the Bretton Woods Agreements by a voluntary committee under the chairmanship of S. E. Harris, and partly also because of the active interest in the subject. The results of this questionnaire pointed toward the modifications in method adopted this year.

Two new committees were authorized by the Executive Committee to continue the experiments on consensus reports: one on the Webb-Pomerene Act and the present Committee on Monetary Policy. The former has resulted in a series of papers; the latter has again followed the questionnaire-poll method.

Procedure in Drafting Questionnaires and Selecting Panel of Respondents

The procedure in drafting these questionnaires involved the following steps:

1. A letter describing the experiment and containing suggested topics of interest and sample controversial questions on both domestic and international policies was sent out to a handful of competent specialists (from which list the membership of the *ad hoc* committee was later formed), with the request that they make improvements, submit suggestions of new topics, and also recommend names of economists best qualified to speak with authority on these subjects.

2. The replies to this letter were processed and a new draft was

made of topics and appropriate questions. This was sent out to the enlarged group (of about 15) referred to above.

3. The answers to this draft were analyzed, and a second improved draft (a preliminary questionnaire) was sent out to a still larger group which now comprised some 75 names.

4. The third and final draft of the questionnaires was a crystallization of the many suggestions received and the experience gained from the answers of this group.

5. Copies of the Domestic Monetary Questionnaire were sent to 118 specialists in this field (63 were returned), and copies of the International Monetary Questionnaire were sent to 94 (of which 40 were returned). There was some duplication involved, since 26 received both and 11 answered both. The panel of the 173 members to whom questionnaires were sent and those sending replies is available to anyone interested.

From the above description it is readily seen that the selection of the questions and of the respondents participating in the poll was not mechanical. Neither was it arbitrary. The list of topics and names grew from original suggestions of the Chairman and multiplied as the ideas spread from the members of the Committee through the larger groups. The panel of names may not represent the best choice of monetary authorities within our membership, but each person on the list is there because of his competence to speak with authority on at least one question involved in the questionnaire. It was originally planned to submit the questionnaires to 100 to 200 names selected from Groups 7 and 8 of our membership classification. However, the method followed seemed to find more favor with the participants as the experiment proceeded. The topics also represent problems of vital interest. It would be difficult to gauge how "representative" the samples of topics and personnel really are, because they are not designed to represent any specific thing. What results would you expect from a panel so selected? Conceivably, the original group, if biased, might have accentuated their biases. However, no evidence of bias seems to have made its appearance and no one has so far made any allusion to our sample being weighted one way or another.

Description of the Questionnaires

The questionnaire on ***domestic*** monetary issues consists of two parts: I—a general dragnet question on past public policies (of the thirties), ranging from silver subsidies and dollar devaluation to lend-lease, patterned after Elmo Roper's ***Fortune*** survey to business executives in 1940 (calling for 39 answers); and II—a selection of 11 questions covering current problems of vital interest which are amenable to Yes-No-

Comment answers (calling for 97 answers) making a total for I and II of 136 questions to answer. The second questionnaire, on *international* monetary policy, consisted of 11 questions of the Yes-No-Comment type (calling for 86 answers). In all, 222 questions were asked of two set of respondents. At first glance, the length and detail of these formidable-looking questionnaires probably aroused resistance, but in a covering letter it was pointed out that the respondent should "select only those topics within [his] special field of interest and competence and attempt to answer those questions upon which [he] can express judgment based upon careful study but without special preparation." Quite a number answered all or most of the questions, and they were encouraged to do so provided they distinguished answers "based on judgment" and "points of view" unsupported by careful study. Not many made the distinction, and no effort was made to classify such answers separately.

The respondents were also requested to return their answers within ten days, a requirement which may have had a marked effect on the number of answers returned.

Results of the Poll

The results of the poll were tabulated on work sheets in a manner permitting each individual respondent's answers or any selected group of answers to be identified. An over-all summary of the Yes-No votes and number of comments by Yes and No answers was then transcribed on copies of the questionnaires. These are reproduced in the report on the round table session included in this volume.

Quantitative Analysis of Agreements and Disagreements. The samples with which we have been working are not large enough to produce very convincing measurable results, but the analysis is interesting and is presented for what it may be worth.

The Questionnaire on Domestic Policies contains in all 136 questions. Following last year's precedent,[1] we may consider those answers 75 per cent or more Yes or No as falling within the area of agreement, the area between 25 and 75 per cent Yes answers representing disagreement. Of the 136 questions, 60, or 44 per cent (those in boldface in the table), fell within the area of agreement. A few more agreements were negative than positive. In the International Monetary Questionnaire, 42, or 48.8 per cent, of the 86 questions asked were answered in the same sense by 75 per cent or more of the respondents. In this instance there were a few more Yes agreements than No agreements. Totaling the results for both questionnaires, we find that 102 answers to the 222 questions asked represent agreements, or nearly 46 per cent. This is a fairly high correlation, and the fact that it is not the mere result of chance is sup-

[1] *Papers and Proceedings*, May, 1945, pp. 432–436.

ported by further evidence. The answers to the questionnaires submitted by members of the *ad hoc* Committee were separately tabulated, as were the first 25 answers received from the respondents, and in both instances the results ran true to form. A difference in sense appeared only in a few cases, and even the percentage of Yes answers did not vary markedly in the two samples when compared to the total.

Interpretation of the Results. The results were sent first to members of the *ad hoc* Committee and to selected persons whose contributions had been most helpful in drafting the questionnaire, with the request that each person express his reactions to the results of the poll. In particular, they were asked: (1) Are Yes-No answers worth anything without benefit of "comments"? What can you make out of them? (2) Are the answers what you would expect of trained economists presumably familiar with the field? If not, what had you expected? Would you expect different results from laymen or from specialized economists in other fields? (3) Are the right questions asked to bring out the real issues? (4) What else is wrong with the questions, and how can they be improved? (5) What are the limitations of the poll method of discovering whether or not a number of economists agree or disagree, and in what respect? How else would you suggest that we test consensus? (6) Assuming that this or other methods can successfully mobilize informed opinion on vital public issues, do you think that we should use the procedure for any other purpose than in connection with the annual program?

While only a few responses were received from this inquiry, the analysis of the Yes-No results, without benefit of comments,[2] was not disappointing. They were all in agreement that Yes-No answers did have a meaning. The members of the *ad hoc* Committee sending in replies commented significantly that, with few exceptions, some of which provoked surprise, their own answers agreed with the total results; that is, the majority answers were also theirs. They agreed also that, although the Yes-No technique works reasonably well, some of the questions failed to bring out the real issues and there were too many questions; i.e., we attempted to cover too many aspects of the problems. The poll method suffers, therefore, because of the heavy task which it imposes upon the respondents. Although an opportunity is given to qualify answers and to make reservations in the Comment column, not enough use is made of this privilege. Also, some members pointed out that respondents failed to see the questions in their correct setting and suggested that covering statements accompany each question, pointing out the economic implications of the problems posed. In this way atten-

[2] A transcription of the comments was later sent to these members, who in some instances were able to elaborate their interpretation at the round table session.

tion could be centered on the real issue and answers would be more intelligent and less a matter of emotional reaction. Finally, the Committee members agreed that the comments on the returns should be carefully appraised in writing up the results of the poll.

With regard to the use of polls for purposes other than in connection with the annual program, opinion was divided. All agreed that this technique provides a valuable stimulus to participants in crystallizing their own judgments on economic problems of public interest, but some of the members of the *ad hoc* Committee warn us of the dangers involved in publicizing results of consensus polls, especially if statements emanating from this source are used to influence public opinion and legislation.

Much additional evidence on the above questions materialized at the Round Table Session on Monetary Policy, in connection with the discussions of the substantive issues and problems raised by the questionnaires.

With regard to the burden of answering formidable questionnaires, it was suggested that we should attempt one topic at a time and one with less coverage. Perhaps we should have learned this lesson last year, but it is hard to gauge human behavior. It was difficult to interest people in the initial stage; yet once started it was hard to check the insistent demands that all manner of subjects be treated, and from altogether too many angles. The questionnaires, especially the domestic questionnaire, became "swollen." However, the testimony on this issue is not altogether one-sided. At the Monetary Round Table, several reporters expressed their conviction that more questions, rather than fewer, would have been desirable in order to bring out real issues and finer and more explicit distinctions. Thus, we face the dilemma of asking too many questions, which might discourage respondents, or too few questions to produce desired results.

Several reporters at the Monetary Round Table asserted that some of the questions were not amenable to simple Yes-No answers. Parenthetically, a few of the respondents to whom the questionnaires were sent even refused to return them, but wrote letters instead, explaining that they "had no stomach" for answering the forms since they felt that each question called for an essay and not a Yes-No answer.

Everyone with any experience in drafting questionnaires knows how difficult it is to frame any question so that it can be answered "Yes" or "No." Especially in the field of the social sciences, drafting of satisfactory questions is extremely difficult because of the complexity of the problems with which we have to deal.

Another weakness of the questionnaire method, which may in part be due to our effort to cover too wide an area, is the obscurity of the questions. That is, the implications and meaning of the questions

are not always apparent to respondents. As one critic put it, the questions take too much for granted; they catch respondents "cold"; and the answers could have been improved had the questionnaires been accompanied by a brief discussion of each major topic, so as to make respondents aware of the issues involved.

The criticism that our questions did not in all cases bring out the "real" issues is not a peculiarity of our method. Real issues often make their appearance only after other issues have proved not to be as real as their originators thought they were. The fault is in the questions and not the method. For the most part the answers were considered logical and not emotional—"inconsistencies might be explained in column 3." One observer called attention to the modification of views by economists who would not have supported several proposals receiving a majority vote fifteen to twenty years ago, and another considered the results of this poll "more sensible" than last year's.

The value of soliciting comments as a part of the questionnaire procedure has been alluded to again and again. These comments often throw a good deal of light on Yes-No answers. Qualifications or reservations made by the respondents may change a "Yes" answer to "No" and vice versa, suggest defects in the question as formulated, prompt consideration of more significant issues than the one treated, lead to the addition of new subdivisions which should be included if the issues are to be more clearly defined. Comments should therefore be studied with care.

Further Appraisal of the Questionnaire Method. Many thought-provoking suggestions were made at the Monetary Round Table with regard to procedure. For example, in concluding his comments on question 6 of the domestic questionnaire, Dr. R. I. Robinson stated:

> Because of the diversity of implied assumptions made by the respondents to this question, it is impossible to draw any very useful or dependable conclusions. The shape and color of prevailing opinion among economists on this issue of public policy is still ambiguous. The lesson to be learned from this experiment is more methodolgoical than substantive. If a questionnaire is again to be circulated within the profession I suggest: first, that the issues involved be sharply narrowed, perhaps accompanied by some explanatory statement; and, second, that the questions used should be carefully modified so as to indicate the circumstances in which they are expected to apply. It can only be by such a sharpening of issues that the count of noses would be unmistakable. Economists as a group do not now enjoy any too firm a position in public esteem. A division of opinion resulting from ambiguity in the process of canvass will not help to remedy this state of affairs.

Dr. E. W. Swanson, referring to the same group of questions, asserted:

> They no doubt require modification if the net results are to be more explicit. The amount of modification necessary is not so great, however, as to make useless the Yes-No approach to economic issues. The real issue is that of asking the right questions, and the right question can usually be formulated through repeated testings before the final questionnaire is transmitted. The members of the American Economic Association undoubtedly are the best source of information about problems of this kind. However, the Association might consult the opinion-

research people on the adequacy of questions. The technique should be developed further, and it is really worth much time and thought.

Professor M. E. Garnsey, discussing the International Monetary Questionnaire, stated:

> It is admittedly imperfect at the present experimental stage. Nevertheless there are important reasons why the technique should be refined and developed. A summary of the views of experts on matters of public policy provides valuable stimulation to specialists and nonspecialists who wish to arrive at their own judgments. Although the poll cannot give a definitive expression of expert opinion, the composite view of qualified experts is certain to be superior to the partial and one-sided conclusions which often influence the layman or the administrator in making policy decisions. Frequently the administrator and the layman are unduly influenced by the views of a single expert or group of experts, and by the persuasiveness of partisan presentation. The expression of opinion by a large group of experts which show a consensus of agreement ought to be important in the formulation of public policy. Economists cannot shirk their responsibility to perform this function.

Reporters at the Monetary Round Table were by no means all favorably disposed toward the questionnaire method. In fact, their testimony, based on the two samples tried out this year, gives us no distinctive "green light" to go ahead with this technique. Perhaps the most penetrating criticism was submitted by Dr. Imrie de Vegh. It is quoted in full:

> Going beyond the results and beyond questions of technique, I wonder whether the stated aim of these polls, of "focusing and making the informed opinion of our membership more effective in matters of political importance" is well chosen. I wonder also whether polls are the proper means to this end.
>
> As to the aim itself, it seems dangerous for the Association and adequate safeguards cannot be devised. The primary purpose of the American Economic Association should be to cultivate the scientific tradition in economics and to leave matters of political propaganda to the individual initiative of the more venturesome among our members. To make the Association pronounce on current politico-economic issues means to embroil the Association itself in political controversy. This is apt to dissipate its prestige in the long run and to run the risk of its being unwittingly exploited to serve the interests of political movements. The proponents presumably hope to raise the level of economic analysis in public discussions. This would be praiseworthy, if feasible, but I wonder whether a lowering of the level of economic analysis within the Association will not be the more likely result.
>
> Consensus has never produced a masterpiece. A majority opinion is always suspect. To have the Association proclaim majority opinions more or less condemns it to be chronically wrong albeit wrong in a respectable way. Conversely, if all minority voices are to be heard, we shall have institutionalized the Tower of Babel.
>
> Specifically as regards the use of consensus polls, it seems the least satisfactory means of all to find guidance on issues of public policy.
>
> Polls ascertain the mometary state of opinion. More often they ascertain the state of emotion of those polled. They carry little weight with respect to the truth or falsity of the views that constitute their subject matter. Especially in the field of economic policy, where economically exogenous factors are often the decisive ones, the vote of the majority can hardly ever be expected to yield clues as to what is the right policy.
>
> In seeking truth, or wisdom, or the right policy we are grappling with something terribly elusive. Discussion, if it were kept on a sufficiently nonpolitical and unemotional level, would be a valid means of improving our approach to problems. Opinion polls will merely tend to foster our already excessive tendency to place social approval ahead of reason.

This severe criticism was at least partially offset by Professor Beckhart's concluding remarks that "in this instance the questionnaire method of eliciting informed opinion on current questions and issues has certainly proved its worth and should be continued in the future."

Conclusions

On the basis of our experience with the questionnaire method, the following conclusions seem warranted. However, since no Committee action was possible, these conclusions should be construed as very tentative ones.

1. Interesting and promising results have materialized from the experiments so far carried on.

2. The questionnaire or poll method is a useful device in focusing informed opinion of professional economists on matters of public policy. The mechanics of drafting a questionnaire can be used to interest a large number of specialists in defining and formulating vital economic issues and in crystallizing their views on public questions calling for logical and meaningful answers. Incidentally, the questionnaire and poll method of seeking consensus provides good material for round table sessions on substantive problems and issues, and their possible solutions. The present investigation could easily have materialized in two monographs or reports—one on domestic monetary issues and one on international monetary issues. And, with an extension along the lines where greatest interest seems to have developed, separate reports could easily grow out of questions on commercial bank reserve requirements, government guarantee of loans and financial aid, Federal Reserve credit control, relationship of the Reserve System and the Treasury, low interest rates, commercial bank holdings of government securities, 100 per cent reserve money plans, monetary and fiscal policies in relation to inflation, and topics treated in the International Monetary Questionnaire: methods of determining postwar exchange rates; exchange controls in relation to domestic business; extent to which a nation can permit freedom of international payments; the impending scarcity of dollar exchange; the British external debt and balance of payments problem; foreign loans and investments.

3. Our measures of the results of the polls so far taken have all been on too small a scale to produce convincing evidence that quantitative results have very precise meaning. They do, however, point in the right direction; namely, that there is a high correlation of agreement (more than chance) on a large number of economic issues. Marked differences do exist and always will, not only on the fringes, but also on many fundamental issues. However, this method roughly defines boundaries of agreement and disagreement.

Some work has been done in comparing selected parts with the whole sample and the results are found to conform to a characteristic pattern, but nothing much has yet been done to compare the opinions of economists with those of nonprofessional groups. Opinion research organizations are not interested in using our questionnaire on their lay

clientele because our topics and problems are considered too technical.

4. The questionnaire or poll method can be improved. In the first place, since the effort is to get a collective judgment as a final product, the work can best be started by a small committee whose members find it possible to meet frequently. Carrying on the work by mail communications is slow and tedious.

Although the questionnaire technique has value per se, its usefulness can be improved if combined with the consulting panel report method. A further development of procedure would involve the following four steps: (1) Drafting questionnaires of the type used in this experiment and distributing them to a panel of experts, evolved as in this case or in some other manner. More emphasis should be placed upon soliciting comments from respondents. (2) The analysis of the results of the vote and comments by a small committee of qualified experts. (3) The preparation of a consensus statement or report by that small committee. (4) Resubmission of this consensus statement to the entire panel for approval or disapproval—with the usual provisions for dissenting opinion in the majority statement.

The above procedure might logically be reversed; namely, by starting with the draft prepared by the *ad hoc* committee of specialists; soliciting questions covering the main issues and drafting a questionnaire covering the breakdown of the main problem into its segments; circulating the questionnaire and finally writing a report of the results obtained.

5. Although members of the *ad hoc* Committee have individually expressed their interest and desire to see further experimentation carried on along the lines of the "functions of government" and the "monetary questionnaires," the Committee makes no such recommendation. The Chairman would personally like to see the work continued by the Association in co-operation with some institution with a capable economist-director who has a staff—a large staff—of analysts and clerks to process the returns.

REPORT OF *AD HOC* COMMITTEE ON AGRICULTURAL PRICE SUPPORTS

By Elmer J. Working
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In 1944 Dr. Joseph S. Davis, then president of the American Economic Association, appointed a committee of five to consider the problem of agricultural price supports and to prepare a consensus report on the subject. In addition he appointed a consulting panel to advise with the Committee. It was originally intended that the Committee should report to the Association at the meetings which were scheduled for early 1945, but with the cancellation of the meetings that plan had to be dropped. President Sharfman, however, asked that the present round table be organized to discuss the subject of agricultural price supports, and that a summary of the Committee's report be presented. As Chairman of the Committee, I am presenting that summary for the Committee.

At the outset, it is necessary to make clear the way in which the Committee has used the term "price supports." We include under that term any actions taken for the purpose of supporting the per-unit returns which farmers receive for the individual products which they sell. We include, then, both market price supports and supplementary payments made to attain the equivalent price objective. Income supports, on the other hand, are direct payments made to support income, but without the objective of attaining specific per-unit returns for sales of individual products.

The Committee's deliberations have resulted in general and fairly complete agreement among the members as to what would be a desirable policy concerning agricultural price supports. A few of the outstanding points of agreement and recommendation are as follows:

1. Price commitments for the "Steagall period" should be met, in the main, by supplementary price payments, not by market price supports.

2. Aside from situations growing out of the wartime emergency, the demand for price supports arises principally from the cyclical problem of low agricultural income. This should be dealt with by: (a) measures to maintain industrial production and employment; (b) a sound fiscal and monetary program, both national and international, designed to assure conditions conducive to stability in prices and trade; (c) measures to assure farmers that their income will be cushioned against collapse in event of a depression.

3. Market price stabilization operations are desirable in some cases,

particularly for livestock feeds, provided they are designed and operated so as to be self-supporting.

4. Agricultural market price supports tend in the long run to defeat their purpose of increasing agricultural income, and also to destroy the ability of prices to direct production, distribution, and consumption.

5. Problems of agricultural distress due to improper farm organization and management, drought, malnutrition, sickness, and other misfortunes should be met by aids appropriate to the causes, not by agricultural price supports.

6. In order to assure long-run equality of opportunity in agriculture and other industries, it is essential that it should be made easy for the surplus agricultural population to enter other industries.

7. Although the parity principle has much to recommend it as a general guide to agricultural policy, the use of parity prices for individual agricultural products or any fixed percentage thereof as a goal for price stabilization or other price influencing operation is unsound.

The Committee's report deals with the background of these points of agreement in considerable detail. For the purposes of this meeting, however, there is time for only a brief explanation and justification of them.

Through acts of Congress our government is committed to support the prices of many important agricultural products at not less than 90 per cent of parity for a period of two years after the first of January following a declaration by Congress or the President that hostilities have ended. Therefore, such supports are presumably to continue through December 31, 1948. In large measure, these supports are the agricultural counterpart of contract termination provisions which apply to most other suppliers of war goods. They were designed to encourage farmers to expand production for war needs by removing the fear that the expansion would result in low prices and losses following the war, and before farmers could readjust their production to postwar levels of demand. The two- to three-year period is, of course, rough and an unsatisfactory means of approximating the time needed for readjustment. Nevertheless, such commitments are an obligation which should be carried out in substance even though it should be impossible or unwise to carry them out to the letter.

Agricultural price supports are likely to continue to be a political issue and a governmental problem long after 1948. There has been much agitation for such supports and a considerable amount of price supporting by the government throughout the past quarter century. Furthermore, the demand for price supports arises out of a deep-seated malfunctioning of our economy, and there is little prospect that this will be corrected within a few years after the close of the war.

How we meet the problem concerns the very fundamentals of our way of life. Our economy is based on a system of private enterprise directed through competition and the price system, and the historical evidence suggests that a political democracy cannot survive long under any other sort of economic system. Over a period of many decades, however, we have been drifting away from the "ideal" of perfect competition. Corporations have grown larger and larger; labor organizations have grown and increased in power until today the decisions of a relatively small number of corporation executives and labor leaders are of major importance in determining the levels of production and employment throughout the country. The individual worker is swallowed up in the group so that he often has little choice—over considerable periods of time—whether he works or is idle. Accompanying the rise of organization and the decline of competition between individuals—especially of price competition—our ability to produce has increased, but our depressions have been growing more and more severe.

Partly as a means of counteracting the decline of competition, but sometimes contributing to it, there has been a trend over the years toward greater government regulation and control. Some controls have been directed toward preventing monopoly, others toward supplanting the ineffective competitive forces in the determination of prices—including wage rates—and otherwise directing production and affecting individual incomes.

In spite of all these trends, the utilization of our resources in the production and distribution of goods and services was, prior to the war, carried on primarily by private enterprise directed through competition.

During the war the process of directing private enterprise through competition and the price system was largely abandoned. Methods used by the federal government to finance the war threatened to cause a severe price inflation which would wreck the ability of the price system to function effectively. Furthermore, it was necessary to develop the production of war goods so rapidly that price incentives were not sufficient. Consequently we adopted price controls and, in addition, many other governmental controls, such as priorities, allocations, production goals, and rationing. Price controls were, for the most part, designed to check price increases rather than to direct production and consumption. Hence the price system was no longer the primary means through which production and consumption were directed.

What is to be our postwar economic policy? Are we to return to a system of private enterprise directed through the price system, or are we to develop methods of guiding production and consumption through government directive during peacetime?

Agriculture long provided the classic example of free competition. If

we adopt a system of agricultural price supports as a permanent feature of our economy, perhaps we shall find ourselves committed to an inexorable growth of governmental control throughout our economy and to the development of an authoritarian rather than a democratic form of government.

Generally speaking, our experience with agricultural price supports in the past has not been very encouraging. The failure of the Farm Board is well known. The Commodity Credit Corporation is in better repute, but this is due largely to the "accident" of the war. True, the CCC got along fairly well from 1933 to 1937 during a period of generally rising prices and improving demand. But, partly because the price level did not continue to advance, and partly because Congress raised the percentage of parity at which the corporation was obliged to make loans, the CCC soon found itself in serious difficulty. Stocks of grain and cotton accumulated to unprecedented levels, and had it not been for increased demand resulting from the war, storage facilities would have become completely overburdened and the entire program would have required drastic overhauling.

Price supports during the war, however, served a very useful purpose. They helped to adapt our agricultural production to the unusual needs of wartime. Soon after the first announcement of price supports to encourage production for certain commodities Congress passed a law requiring that the support prices should not be less than 85 per cent of parity. Later the percentage was raised to 90.

These postwar price floors which Congress has directed the Secretary of Agriculture to maintain are not forward prices of the sort that have been advocated by some economists. They are not designed to direct agricultural production in accordance with postwar needs. Indeed, if they continue in force, and if no special measures are taken to prevent high prices from stimulating production, they may be expected seriously to misdirect agricultural production. This is because parity prices, as they are defined by law, do not constitute a balanced set of price relationships for agriculture. Thus, if prices of cotton and wheat are maintained at 92½ and 90 per cent of parity, production of these commodities tends to be unduly encouraged and consumption to be held at too low a level. On the other hand, some commodities should have prices well above parity in order to obtain sufficient production.

Various methods might be employed partially to overcome these difficulties during the "Steagall period": (1) direct production controls could be imposed, (2) prices received by farmers might be maintained at abnormally high levels relative to central market and retail prices, (3) some other method of subsidizing consumption could be used. Perhaps the best solution of the difficulty would be to provide for supplementary

and this in turn to result in a reduction of acreage during the following

price payments so that if market prices are not as high as the support level, payments would be made direct to farmers to compensate for the difference.

In order to carry out the intent of the price support commitments of Congress for the "Steagall period," it is the opinion of the Committee that instead of direct market price supports it would be better, in most cases, to use a system of supplementary price payments, leaving market prices free to fluctuate in accord with the current supplies and demand. In this manner the most serious disadvantages of price supports could be avoided. The amount of the supplementary price payments would be arrived at through determining by how much the average market price received by farmers for the commodity during the year fell below the support level commitments. The difference would represent the amount of supplementary payment to be made per unit of the commodity. The farmer's supplementary price payment would be the quantity of his net sales of that commodity during the year multiplied by the per-unit supplementary payment.

The desirability of price supports after 1948 must be judged on the basis of fundamental long-time merit rather than in view of a heritage of wartime expediency. In the opinion of many observers, price supports are desirable as a means of attaining stability of agricultural prices. As a background to this view it has been said that the wide fluctuation in prices of agricultural products is due to "the erratic fluctuation in the production of different crops . . . and because of fluctuation in demand. . . . The resulting fluctuations in prices are a major disturbing force in agriculture."

But might not disturbances be greater if prices were not permitted to fluctuate? Acreages of individual crops have been quite stable in the past. Indeed the stability of acreages of agricultural crops has been in marked contrast to the variability of production in industries where prices have been held stable.

If prices do not change, the value of production of any commodity would depend only upon the amount of production. A big crop would have a high total value; a small crop, a low value. There would be similar fluctuations in income from the crop. Hence, stability of prices would not mean stability of farm income. Where prices are established under free competition, on the other hand, a large crop tends to result in low prices and a small crop in high prices. In their effect on farm income, price changes tend to counterbalance the changes in production. (They may more than counterbalance the changes in production and result in an even greater—and opposite—fluctuation in income than would the varying production with a fixed price.)

Under competitive pricing, a large crop tends to result in a low price

and this in turn to result in a reduction of acreage during the following year. If prices were stabilized so that the volume of production had no influence upon them, we might well find that high yields and a large crop would result in an increase of acreage in the following year. Consequently, price stabilization instead of tending to correct the effect of fluctuating yields might tend to aggravate it.

In appraising the desirability of price supports it should consequently be borne in mind that price fluctuations, as well as prices, have a function. Even though stability of production is planned, fluctuations in agricultural production are bound to result because of differences in the weather and other factors which are beyond human control. Given these production fluctuations, price changes are desirable, though perhaps not precisely the price changes which result through private enterprise and free competition in our existing market mechanism.

It is the opinion of the Committee that within agriculture, competition and private enterprise have worked fairly well in the past. Agriculture has maintained its full share of production and employment even in periods of general business depression. But in some other industries competition and private enterprise have not worked so well. The low level of prices of agricultural products relative to industrial products which has prevailed during much of the past two decades has been due principally to the fact that the operation of private enterprise and competition in other industries has not been such as to result in a uniformly high level of production and employment in those industries.

This is not to say that the competitive pricing mechanism for agricultural products operates perfectly. In many cases prices appear to be oversensitive and to fluctuate more than is required for functional efficiency. It should be possible in such instances to reduce the instability of prices by stabilization operations which are on a self-supporting basis. It would probably be particularly advantageous to reduce the fluctuations in prices of the feed crops, since that would in turn tend to reduce fluctuations in the production and prices of livestock and livestock products.

However, the main problem for agriculture lies in the cyclical fluctuations which are caused by the failure of other industries to maintain a "full level" of production and employment. During depressions the people in agriculture have suffered declines in per capita income which were even greater, proportionally, than those of the nonagricultural population. What agriculture needs above all is the maintenance of a high level of domestic demand for its products through full employment and large production by other industries. If this could be assured, and if farmers could also be assured that the surplus agricultural population would have ready access to nonagricultural occupations, there would be little occasion for agricultural price or income supports.

It is consequently of utmost importance to agriculture that full employment and production be maintained. Agriculture should give support to any sound and consistent measures designed to this end, for they would be aids to agriculture as much as to other industries.

It is also of primary importance that we have a sound fiscal and monetary program—both national and international—as a basis for providing stability of trade and of the general price level. Such a program would contribute to the welfare of agriculture both through its effect upon the stability of production and employment in other industries and also more directly in its influence upon trade and prices of agricultural products. It would have the very great advantage of not interfering with, but rather of aiding, the operation of a system of private enterprise and competition. The formulation—or even the discussion—of such a program, however, is not within the province of the Committee on Agricultural Price Supports.

But although we may have high hopes, we should not count on full success for such measures. We need to be prepared to protect agriculture against disproportionate suffering as a result of an inability of the government and other industries to prevent underproduction in those industries. Furthermore, appropriate aid to agriculture in a period of depression will help to lessen the severity of the depression and will help to initiate recovery. It will consequently be in the interest of the general welfare as well as in the interest of agriculture.

The necessary aid to agriculture can presumably be supplied either through price or income supports. In determining upon a method of aid, however, it is important to be sure that the indirect effects of the methods are not overlooked. The method of market price supports has the obvious advantage that it avoids direct payments by the government to individual farmers. Farmers generally are individualists and they like the idea of having their incomes determined impersonally and impartially by the forces of competition in the market place rather than by the decisions of politicians or government administrators. From their standpoint, it is bad enough to have a group obligation, but to be individually obligated is both distasteful and socially dangerous. They fear that any system which requires the determination by government officials of how much each individual is to receive will be subject to abuses and corruption.

The maintenance by the government of an effective system of support prices for any commodity would, however, require a great degree of control over both its production and its distribution. Either the prices would be the means by which production and consumption would be directed, or else the government would have to provide some other means of directing production and consumption. Hence the co-ordination of production and consumption would no longer be directed by

competitive private enterprise. If such a system were to be put into effect for all important agricultural products, it would be a long step in the direction of substituting governmental control for the "automatic" control of competitive enterprise.

Perhaps the greatest danger in the administration of support prices arises from the fact that many people will be financially interested in what those prices are to be. This gives rise to political pressures which may result in the establishment of prices which are uneconomic, and hence not in the best interest of the nation. It also provides incentive for corruption of administrators and other government employees. Administrative officials might be influenced to make desired decisions and they or minor employees might be induced to disclose "inside" information, which would give its possessors unfair advantages.

As long as those who control government policies are subject to popular election, any price policies which they direct are bound to be influenced by political considerations; but to remove government officials from all political accountability would be even worse. To have price administrators free of political pressure would not insure that they would always act in the interest of "general public welfare." As William Pitt said, "Unlimited power is apt to corrupt the minds of those who possess it." Without political accountability, we should probably soon find that price decisions would be made in the interest of those making the decisions rather than in the interest of the general public. In the long run, the only means of maintaining administrative policies consistent with public welfare is to make the administrators subject to the will of the people.

If we are to avoid the danger of unsound price decisions by Congress and other governmental agencies there are, fundamentally, two alternatives. The one is to leave price determination to the field of competitive forces and private enterprise. The other is to develop our political organization so that the selfish interests of minority groups are less effective in making policy decisions.

In view of all these circumstances it would not seem to be in the interest of agriculture or of the general national welfare to supplant our system of determining prices of farm products through private enterprise and competition. If there is any practicable alternative, it is doubtful whether the benefits gained through widespread cyclical price control by the government would, in the long run, outweigh the disadvantages of the high administrative costs and other difficulties involved in such a system.

As an alternative to price supports, it is proposed that if—in spite of all other measures—depression does occur, the problem be handled for agriculture through direct income supports. The total amount of pay-

ments to be made to farmers during periods of depression could be determined on the basis of the relationship of the per capita net income of the farm population to the per capita net income of persons not on farms. Thus it might be the objective of the program to supplement the income of the farm population by whatever amount its income fell below the level necessary to provide a per capita income equal to some specified percentage of a predetermined parity. Once the total amount of the payments was determined, this amount would be divided among farmers according to their net sales of farm products during the year. Net sales would be total sales minus purchases of farm products—purchases of feed and livestock, for example.

Important advantages of such a system would be: (1) It would retain the effectiveness of competitively determined prices for directing the production and consumption of agricultural products. (2) It would leave the determination of the relative incomes of individual farmers to the impersonal forces of competition and the market place. Administrative decisions would be involved in determining what percentage supplementary payments would be of net sales, but the same percentage would be given all farmers alike. (3) It would be simple to administer.

It would be comparatively easy to determine the total amount of each farmer's sales and purchases of agricultural products. Declarations as to the amount of these sales and purchases should be made available to the Department of Internal Revenue for checking against income tax returns. In this way dishonesty of returns would be guarded against, for while large net sales would be an advantage as a claim for supplemental payments, they would be a disadvantage from the standpoint of income taxes.

It is beyond the scope of this report to go into the details of how such a system of supplemental income payments could be put into operation successfully. What is important for our purposes here is that it would be a way of meeting the problem of cyclically low prices for agricultural products. The need for direct price supports would then be so small that they could be either entirely avoided or limited to price stabilization operations which would be on a self-supporting basis.

A great danger of making any use whatever of governmental price supports is that the very success of their proper use encourages their adoption for purposes to which they are ill-adapted and which will interfere with or destroy the function of prices—and of competition—in our economic system. More specifically, whenever any considerable group of farmers is in economic distress, there is danger of an attempt to relieve their situation by raising the prices of the products they sell. This may be done whether the distress be the result of a regional drought, or due to the absence of adequate opportunity for surplus agricultural popula-

DISCUSSION[1]

tion to enter other occupations, or to inefficiency or other maladjustments or misfortunes of certain groups of farmers. Such problems need solution, and often call for government aid. But means such as crop yield insurance, education and vocational guidance, soil conservation, rural health activities, and services such as those of the Extension Service and the Farm Security Administration should be used according as they are appropriate to the cause of the difficulty. The use of price supports to alleviate distress due to such causes should be steadfastly avoided.

There is, nevertheless, a place in governmental activities for various programs which indirectly tend to stabilize or raise prices of agricultural products. These include unemployment insurance, aid to low income groups—including the food stamp plan—and nutritional programs. Such programs should, however, be designed and administered to serve their primary purpose, not with a view to their incidental—and rather temporary—effects on farm welfare.

The Committee recognizes the importance of having positive criteria to guide administrators in the conduct of any desirable price support program. It also recognizes and commends the principle of attempting to direct price policy so as to contribute to economic balance. Both of these are fundamental background reasons for the development of the present legally defined parity prices. Nevertheless, the Committee unanimously disapproves of parity prices as presently defined in law, or of any fixed percentage of those parity prices as a goal for price supports. We consider such goals to be inimical to the long-time welfare of agriculture as well as to the welfare of the nation as a whole.

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DISCUSSION[1]

Helen C. Farnsworth: The two principal speakers have made so many statements that I agree with and so many others that I am inclined to question that I find it difficult to pick out a few key points to discuss in the time at my disposal. If I seem to concentrate on points of disagreement rather than on "amens," it is not because I think the wider margin of agreement does not deserve the greater emphasis.

Let me start with a question to which somewhat different answers have been given by Dr. Black and the Committee on Agricultural Price Supports: How far should the government go in guaranteeing farmers' incomes?

During the past two decades the American public has come to accept the idea that one of the proper functions of the national government is to prevent the spread of human distress in any major sector of the population. To fulfill this objective, different measures have had to be devised to deal with the income problems of urban workers, on the one hand, and of farmers, on the other. For farmers, it has seemed best for the government to guarantee certain minimum levels of farm prices or farm incomes. But the definition of these minimum guarantees has changed markedly during the past thirteen years—in the legislation passed by Congress, in the minds of many farmers and farm leaders, and in the minds of certain economists.

Somehow, there has been an important and subtle shift in the thinking of these people. Leaders of the American Farm Bureau Federation and the National Grange no longer talk about the government preventing distress, but about the obligation of the government to establish a farm program that will enable farmers "to receive a fair price in the market place," [2] and to receive "an equitable share of the national income."[3] These leaders are not simply rephrasing the distress-preventing obligation of the government, nor asking for income-guarantees comparable to the unemployment insurance and other social insurance benefits available to urban workers. They are demanding "fair prices" and "equitable incomes" far above any distress-preventing level. They are asking for a peacetime income guarantee not available to, nor at present proposed for, any other group of American producers.

Should the government go so far as to *guarantee* "fair prices" and "equitable incomes" to American farmers? Neither Dr. Black nor the Committee on Agricultural Price Supports has anything good to say about government guarantees of individual market prices—the basic ideal of most farm leaders. But Dr. Black wants the government to take such steps as are necessary, in the way of subsidizing consumption, "to raise the general level of farm products approximately to the level indicated by parity as it is now figured." The Committee, on the other hand, would apparently prefer a

[1] The Round Table on Agricultural Price Supports was devoted to a paper by John D. Black and the foregoing report of Elmer J. Working. The Report and Mrs. Farnsworth's discussion constitute the only record of this session; hence the transposition.

[2] Included in the resolutions adopted at the American Farm Bureau Federation Convention, December 20, 1945.

[3] Review of the resolutions adopted by the National Grange in December, 1945, *National Grange Monthly*, Jan., 1946, pp. 1, 3.

dropped 60 per cent, while prices of beef cattle and chickens declined

somewhat lower basic level of farm income guarantee—one that would "cushion" the income of farmers "against collapse."

With respect to the *level* of guarantee, I find myself in closer agreement with the Committee's view. I do not believe that it is a proper function of government to guarantee a "fair" or "parity" income level to any group of workers—urban or rural. Yet I should like to see income guarantees to farmers that would insure them not only against *too great* a decline in their incomes, but also against *too rapid* a decline. Moreover, I think there is much to be said for the emphasis which Dr. Black puts on measures involving governmental subsidization of consumption of farm products. I disagree only with the view that these measures should be adopted *for the purpose of improving farm incomes.* This effect should be regarded as incidental and gratifying. In no case should the timing, the form, or the extent of the subsidization be determined with specific reference to farm-income needs. The food and fiber consumption of children and low-income families should be subsidized on account of the consumer benefits to be expected—because the United States is sufficiently wealthy to do this, and because in the long run the policy will probably pay dividends in the form of healthier and better citizens.

Next, I should like to direct attention to the specific plan for income supports approved by the Committee—a plan which has a number of appealing features, but which is not, in my opinion, the solution we seek. In the first place, if the per capita net income figures which the Committee plans to use for the operation of its scheme are the ones that I infer are being suggested (i.e., the series commonly used for parity-income calculations running back to 1910), I regard them as unsatisfactory for the purpose. Many of you know how these farm and nonagricultural income figures are constructed. Among other shortcomings, the *farm income* figures do not include any of the income that farmers receive in the form of wages, rent, and interest from nonfarming activities and investments, whereas these particular payments, actually made to farmers, are credited to the income of the nonfarming population.[4] I do not mean to imply that these income series and the parity ratios based on them are not useful for some purposes, especially if interpreted by cautious users of statistics, like Dr. Stine, who know and keep in mind their limitations. But personally I always try to avoid using these particular series, and I cannot help hoping that they will not be accepted as the basis of any farm program adopted by Congress.

Moreover, even if satisfactory net income series could be found, the Committee's plan of income supports would be open to two other fundamental objections. First, the grouping together of all farm products into a single income-supporting scheme would be justified only if all agricultural prices normally moved downward at practically the same rate in major business recessions. This, however, has not been the case. For example, between 1925–29 (taken as an average) and 1931 the prices of cotton and wheat

[4] The U. S. Department of Agriculture has recently computed another per capita net income series for farmers and nonfarmers that lack the major defects of the older series. But since the new series are available only since 1935, their usefulness is difficult to test.

total volume of net marketings of that commodity multiplied by the differ-

dropped 60 per cent, while prices of beef cattle and chickens declined scarcely 30 per cent. Under such conditions, the Committee's recommendation that equal percentage income supplements be granted to the producers of all farm products in proportion to their reported "net sales" appears difficult to defend. It is clear that relatively the heaviest income payments would go to those producers whose incomes had suffered the least decline.

There is another reason for criticising the Committee's failure to differentiate among the producers of different commodities in its income-support plan. Some farm products are typically produced with the aid of little hired labor and with little outlay in the way of capital investment. The producers of such agricultural commodities consequently keep as *net* income a high percentage of their *gross* cash receipts from marketings; also a high percentage of what the Committee calls their "net sales." The producers of other farm commodities typically pay out for workers and equipment a substantially larger proportion of their receipts from "net sales." This means that if income-support payments were apportioned to all farmers alike on the basis of their "net sales," the payments would represent a considerably higher percentage addition to the net incomes of the second group of producers than to the net incomes of the first group. And, in all cases, large commercial farmers would be benefited more, both absolutely and relatively, than smaller farmers. To keep the record clear, however, it should be pointed out that large farmers are also favored under the present price-support program, and they would continue to be favored under practically all other farm-income programs thus far proposed.

I should like to raise one more point with regard to the Committee's proposal. This is essentially a minor suggestion, but it applies to all price-supplementing and income-supplementing schemes under which farmers are supposed to receive direct payments based on their gross or net marketings. I want only to suggest that the payments should be made not on the value of the net marketings alone but on that value plus crop insurance indemnities received in the form of cash. Otherwise, an insured wheat farmer, for example, would receive income-supplementing payments on insurance indemnities-in-kind (since the wheat received would be marketed and thus swell the value of his marketings), but he would receive no income supplement on comparable cash indemnities, calculated on the basis of current market values.

One important point, on which all three of the preceding speakers have agreed, deserves emphasis. They all registered disapproval of active government support of agricultural prices at the *market* level and agreed that any price guarantee given should apply at the *farm* level, where it would be fulfilled through direct supplementary payments to producers. This would leave market prices free—free to direct consumption, if not also to help control production.

I should like to say a few more words about the calculation of the price-supplementing payments that would be involved in a system of such price guarantees. The total national subsidy to be distributed in the form of price supplements on any given commodity in any year would be equal to the

So far as the central core alone is concerned, forward prices might be

total volume of net marketings of that commodity multiplied by the difference between the *guaranteed* average price and the *actual* average price (unless, of course, the actual price proved to be the higher, when no subsidy would be paid). Next would come the problem of distributing the total national subsidy for each commodity among the individual producers concerned. In a country as large as the United States, where geographical differences in the prices of individual commodities are so substantial, and where there are additional quality factors to be considered, it would not be satisfactory to pay each producer the same per-unit price supplement, as Drs. Working and Black both seemed to imply. A better method would be to distribute each national commodity subsidy among the various producers *in proportion to* the certified value of their net marketings plus their cash insurance indemnities.

The commodity-income guarantees which Dr. Black proposes to offer farmers would apparently be determined on a "forward pricing" basis for individual commodities—at least so long as the combined result obtained by this method met Dr. Black's specification that "the gross value of products for all farm products combined should measure up to an average parity price as now figured." Frankly, I do not know precisely what this means, but I think I get the general idea. If I do, what I regard as the best and most important feature of a satisfactory system of forward pricing (its essential tie-in with equilibrium market prices) would be violated just as soon as that method of pricing did not yield results consistent with the combined-parity-price objective that Dr. Black sets up.

Dr. Schultz[6] and, more recently, some other economists have been so persuasive in presenting arguments for the use of forward prices as the basis of farm income guarantees that this system of pricing may be said to be the current vogue in agricultural price-planning circles. In fact, I have wondered if Dr. Schultz himself does not think that some of the agricultural economists are rather oversold on the idea. But I really should not call forward pricing either "*a* system" or "*an* idea." It has apparently come to mean a great many different things to different people. The original idea has been modified here, and changed there, until some of the forms now current have relatively little in common.

However, most economists who refer to forward pricing seem to agree (I say this subject to correction by Dr. Schultz or any one else, for I am on uncertain ground)—they seem to agree (1) that the United States Department of Agriculture or some other administrative agency should announce early each year (before the planting period) a list of guaranteed prices for the principal farm products, and (2) that these guaranteed prices, referred to as "forward prices," should be determined by experts, who would get what information they could on the *future* supply-demand situation for each commodity and then mix in a good dose of judgment.

So far as I can see, this is about all there is to the central core of forward pricing. And it is not enough to insure good results. Such results could be obtained only if the various details of a particular forward-pricing scheme were carefully constructed to produce them.

[6] Manuscript not received.

So far as the central core alone is concerned, forward prices might be set high or low—to guarantee farmers so-called "fair prices," or simply to ease price declines and to insure farmers against distressingly low prices. Moreover, forward prices, like other forms of farm-income support, could be applied either at the market level or at the farm level. And if at the farm level, they could be established so as to guarantee a single fixed *price* regardless of the size of the national output, or so as to guarantee a relatively fixed *income*, with the price guarantee varying inversely with the total volume of production.

The particular forward pricing proposals that seem to me to be best, from an economic and administrative standpoint, include all of the following features: (1) provision for free market prices, with forward price guarantees at the *farm* level; (2) specification of flexible price guarantees, which vary inversely with the size of the nation's production (this would contribute to income-stabilization, rather than price-stabilization; (3) legal provisions which definitely tie the forward prices to long-term market price movements, thus reducing to a minimum the element of judgment involved in forward pricing; (4) establishment of a moderately low level of basic price guarantees, with emphasis on permitting the forward prices to reflect underlying market trends, while limiting the magnitude of possible price changes from one year to the next.

It is pertinent to note that this list of requirements would have to be changed but little to make it apply to a system of farm price guarantees based on a recent three to five year moving average price. Indeed, these two different systems of price guarantees—one "forward," one "backward" —could actually be so constructed as to bring almost the same results.

A small element of judgment would be involved even in "backward" pricing, since this system would probably operate best if the guarantees were based on "normalized" or adjusted moving averages (with the adjustments made to compensate for prices that had moved out-of-line as a result of abnormally high or abnormally low yields per acre). The degree of judgment involved in such adjustments, however, is notably small as compared with the minimum element of judgment required by any system of forward pricing. Which of these two systems any given individual would choose would depend partly on his faith in the ability of experts to look into the future and partly on his estimate of the strength of the political pressures likely to be brought to bear on the administrators of the scheme. Having considered these two aspects of the matter, I should like to record my belief that the special advantages that might be gained through the forward pricing mechanism would not be worth the risks involved. But I say this hesitatingly, quite conscious of the impressive array of agricultural economists who hold the opposite view.

REPORT OF THE SUBCOMMITTEE ON CONSENSUS AND RECOMMENDATIONS AS TO ASSOCIATION POLICY

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The Graham Committee recommended late in 1943 that the Association establish a system under which *ad hoc* committees would produce reports "focusing and making the informed opinion of the membership more effective in matters of public policy."[1] The Executive Committee gave this proposal lengthy consideration in two subsequent meetings,[2] with the aid of a second report from the Graham Committee and a later memorandum prepared by Vice-President Hardy after receiving comments from other members of a subcommittee under his chairmanship.[3] Decision was deferred because of inability to reach agreement.

The present subcommittee of the Executive Committee was set up in April, 1945, primarily in the hope that it might draft a report on this matter which the Executive Committee might be willing to adopt and carry into effect. The subcommittee was also asked to develop a suggested policy toward requests that the Association give help to private groups engaged in preparing statements of opinion upon public questions.

Before the present subcommittee was organized, two *ad hoc* committees had been established to undertake experiments in what the Graham Committee had recommended. One of these committees was continued, and two additional ones were organized in accord with suggestions by subcommittee members.[4] Our thinking about the question of Association policy entrusted to us has been enriched by the experience of these committees.

This report contains the subcommittee's answers to two questions:

1. Should the Association sponsor efforts to formulate reports and statements of opinion upon issues of public economic policy?

2. Should the Association extend help to private persons and groups engaged in preparing statements or conducting polls on similar subjects?

[1] *American Economic Review*, Vol. XXXIV, No. 1, Part 2, pp. 402, 424–425.

[2] *Ibid.*, Vol. XXXV, No. 2, pp. 453, 456.

[3] *Ibid.*, Vol. XXXV, No. 2, pp. 502–508.

[4] The first two committees dealt respectively with agricultural price supports and the function of government in the postwar American economy. Reports by these appeared in the 1945 *Proceedings* of the Association (pp. 422–447). The work of the former has been continued. The two new committees are to report respectively upon the Webb-Pomerene Act and monetary policy.

I. *Reports and Statements of Opinion Under Association Sponsorship*

There has been general agreement, both in the present subcommittee and in earlier committees which discussed the Graham proposal and its alternatives, that simple, well-considered public statements[5] by economists on questions of economic policy are often needed but often not available. Through such statements, something can be done to help the public distinguish between important and unimportant issues, recognize clap-trap arguments, and become aware of economic considerations which members of the profession think significant. An insufficient amount of such work has been done, and when such statements are available they are often less accessible, clear, cogent, responsible, and candid than they should be. There has also been general agreement that something can be done to improve the quality and effectiveness of such statements by formulating them in the light of cross-criticism among persons who take joint responsibility for the final product. In particular, such a procedure is likely to uncover elements of consensus among divergent views and thus contribute to the constructive resolution of public controversies. The need for such group statements, and the peculiar opportunity which the American Economic Association has to promote them, furnish persuasive arguments that the Association should undertake such work.

That there are limits to what the Association may properly do in sponsoring statements about economic policy has also been generally agreed. The Association's charter says that "the Association, as such, will take no partisan attitude, nor will it commit its members to any position on practical economic questions." The subcommittee believes that this restriction is wise and has no desire to change it. In earlier discussion of the Graham proposal, the Executive Committee took for granted that the Association should not express a corporate opinion upon public questions, nor commit its members directly or indirectly to any particular opinion, nor attempt to exert political pressure; and there was a general desire to avoid types of activity which are likely to be thus interpreted.

Accordingly, the present subcommittee has endeavored to devise a program through which the Association can help illuminate questions of public policy without committing the membership as a whole upon these questions. The proper function of the Association, we believe, is to stimulate interest in discussion of public issues, to help members formulate their views, to provide facilities through which group statements can be developed, and to assist in the publication of statements which, by their candor, professional competence, and good sense,

[5] As used herein, the term "statement" includes documents of varying length, from brief formulations of opinion to carefully reasoned reports which may run several hundred pages.

merit publication. The proper safeguards appear to us to be equally clear. The facilities of the Association should be available to all responsible groups of members, so that when there are differences of opinion within the Association they may be expressed either by rival statements or by joint endeavor to formulate the differences. The Association should make clear that each statement expresses the opinion of only those persons who have taken part in preparing it, not the opinion of other members or of the Association itself. The Association should provide means by which members may criticize the methods and conclusions of any statement.

With such a program, the Association's sponsorship of a method of preparing and disseminating policy statements would be similar to its sponsorship of the *American Economic Review* or the annual volume of *Proceedings*. As in these publications, it would encourage members to express their views but would offer its facilities impartially to members of different opinions. It would endeavor to publish only what is competent and candid; where agreement could not be reached, it would facilitate rather than seek to suppress expression of disagreement. It would not underwrite the opinions which it helped to make public.

In important respects, however, the proposed program would undertake what cannot be accomplished in the *Review*. It would concentrate upon questions of current or prospective importance. It would encourage the development of group statements designed to minimize in public discussion the unimportant and fortuitous differences of opinion which contribute little to public understanding of great issues. It would provide relatively simple statements, addressed not to the technical expert, but to the intelligent public. It would make possible, upon occasion, statements much longer than are suitable for the *Review*. It would make some statements avilable in pamphlet form, so that they could be used more widely than articles which appear in the *Review*.

The program proposed by the subcommittee is deliberately designed to make possible a wide variety in the methods by which statements are formulated, in the purposes which they serve, and in the channels through which they are made public. Doubtless there are cases in which most economists are agreed in holding a view contrary to a widespread public opinion, and doubtless in such instances an extremely simple statement, widely signed, might serve a useful purpose. Obviously there are other cases in which two or more views are widely held among economists and in which discussion might be clarified, within the profession and perhaps within the better-informed portions of the public, if a substantial number of well-informed adherents to each view were to agree upon a statement of the essential features of it. In some cases three or four persons may be outstanding in a given field of inquiry, and a state-

ment of the respects in which they agree might have a substantial influence upon the profession and upon the public at large. In still other cases, it might be profitable for persons of sharply differing views to seek to ascertain whether or not there are points of agreement between them and to formulate an agreed statement of the issues which divide them. It is contemplated that the Association might sponsor any or all of these types of statements, and perhaps others which are not here specified.

It is also contemplated that the extent of the Association's sponsorship might vary from case to case. A Board of Editors appointed by the Association might promote the development of a statement upon a particular subject, just as the Managing Editor of the *American Economic Review* may now suggest that a particular article be written. In some cases, the Board might formulate the issue and select a committee of persons to prepare a statement. In other cases, it might designate an individual to undertake these tasks. In still other cases, a group of members, undertaking such a project upon their own initiative, might solicit the aid of the Board either in preparing the statement or in making it public. Regardless of the procedure used, the statement would not purport to be representative of the whole membership. For example, the project might consist in an endeavor to express the views of the Hansen School on a question of fiscal policy or the views of labor economists upon a federal guarantee of 60 million jobs. Under any of the alternative procedures, the Board would be expected to see to it that the final statement was fair, able, and completely candid about the nature of the group which participated in preparing it. The Board would also be expected to provide opportunity for criticism, either by facilitating the publication of similar statements by dissenting groups or by arranging for publication of critical comment in the *American Economic Review*.

To develop group statements upon controversial issues is difficult; and to express expert opinions upon technical subjects in language intelligible to the general public is also difficult. To overcome these difficulties the initial projects will need to be few, well chosen, and capably manned. Moreover, there is a possibility that the precautions incorporated in the plan will prove insufficient to guarantee the impartiality of the Association's sponsorship or to convince the public of that impartiality. Accordingly, we propose that the program be undertaken upon an experimental basis for a limited period and with restricted funds designed to confine action to a small number of selected issues. If the merit of the undertaking should prove less or its difficulties and dangers greater than we suppose, the project can be abandoned before serious harm has been done. If, however, it is successful, it can be continued on whatever scale is found to be appropriate.

Accordingly, the subcommittee recommends:[6]

A. That the Executive Committee appoint a Board of Editors on economic policy reports, to consist of a small number of members chosen for a limited period, with powers and duties as follows:

1. To stimulate and provide for the establishment of groups to prepare statements upon important questions of economic policy.
2. To receive and pass upon requests that such groups be set up.
3. To watch over the composition of such groups in order that they may be representative and able.
4. To receive policy statements from such groups and from groups independently organized by members of the Association, and to determine whether such statements meet proper standards of fairness and competence.
5. To provide for the publication of such statements.
6. To provide facilities for the criticism of such statements by members, both before and after publication.
7. To formulate safeguards sufficient to prevent public misunderstanding about the degree of the Association's responsibility for the published statements.

B. That the relation between the Executive Committee and the Board of Editors be similar to that now prevailing between the Executive Committee and the Managing Editor of the *American Economic Review*, in that the administration of the project is left to the Board, subject to the over-all responsibility of the Executive Committee for determining the scope and duration of the project and assuring its competence and fairness.

C. That the Board of Editors report annually to the Executive Committee on the progress of the work, and that in the last year of the prescribed period it appraise its experience with the project for consideration by the Executive Committee.

D. That the Executive Committee provide reasonable financial support for the enterprise for the period of the initial experiment and consider, in the final year, whether or not the experiment should be renewed.

II. *Private Polls of Association Members*

A related problem upon which the policy of the Association should be formulated is that of the extent to which help should be given to private groups engaged in formulating statements or taking polls of opinion upon public questions. Requests that members of the Association participate in such statements and polls are necessarily of concern to the Association, since the views expressed are capable of being mis-

[6] Appendix A contains a more detailed draft of one possible way of carrying out these recommendations.

interpreted or misrepresented as those of the Association or of economists at large, and since, with increase in resort to polling, Association members may be subjected to embarrassment or unwelcome imposition.

During the last year the officers of the Association have repeatedly received protests from members concerning private polls of opinion which were being taken among such members. The protests centered upon three points: first, that certain questions had been stated in a way which made it impossible for the answers to convey accurately the views of some of those who were asked to answer; second, that there appeared to be danger that the responses would be represented as the opinion of the American Economic Association or would be mistakenly assumed to reflect that opinion; and, third, that the frequency and scope of the polls was so great as to impose a burden upon those approached.

Of course, polls may be taken and statements circulated among members of the Association without the aid, consent, or advance knowledge of the Association's officers, if the sponsors of such polls and statements choose to use the published *Handbook* and its supplements. In this event, the Association has no control over the choice of questions, other aspects of the procedure, or the use of the returns. Even in such cases, however, the Association's considered attitude might well be communicated to the polling agency, and this would ordinarily be taken seriously in using the returns. Such a practice would render it easy to follow up any abuses which Association members might detect and resent.

The aid of the Association is sometimes sought in connection with polls of its members by individuals or groups, often from among its own membership. Requests have been made, for example, for the use of the Association's stencil mailing list, for help in formulating questions to be answered or statements to which assent or dissent is to be requested, and for aid in locating suitable persons to prepare such questions or statements.

The groups which may request such assistance are sometimes small and sometimes large, sometimes disinterested, sometimes notoriously partisan, and sometimes engaged in the pursuit of their own private advantage. The questions upon which opinions are sought vary from the highly controversial to the platitudinous. The scope of the expression of opinion varies from a simple yes or no to a reasoned formulation of principles and relationships. The purpose to be served by the returns may range from clarification of the thinking of experts, through public education upon technical issues, to pressure upon government officials. These variations in objectivity, candor of analysis, disinterestedness, and character of use may all appear in barely perceptible gradations.

Insofar as the sponsors of such projects are members of the Association and are willing to place themselves under the supervision and conform to the policies of the Board of Editors, as already recommended, there is no need for a separate consideration of the policy questions which such proposals raise. In the cases of outside persons and of groups of members who may wish to proceed through other channels than those furnished by the Board of Editors, special questions arise.

It seems clearly desirable that Association aid should be extended to such projects only under conditions which the Association deems ample to safeguard it against being put in a false light and also to protect its members from unwelcome imposition or embarrassment. Within the field of its competence, the Association should facilitate private efforts to discover areas of agreement among economists so long as these efforts are undertaken in good faith, are safeguarded against misconstructions, and deal with important matters. It is appropriate for the Association, in its corporate capacity, to extend impartial aid to groups which are making such efforts.

Therefore it is suggested that the following policies govern the Association's attitude toward private statements of policy and polls of opinion:

A. To be eligible for assistance by the Association or its officers in the development of such a statement of policy, private sponsors should meet the following conditions:

1. They should have no commercial interest in selling the results of the survey or in supporting any opinion upon the issue under discussion.

2. They should not be engaged in a campaign to bring about the election of any political candidate or the success of any political party in an election.

3. They should be engaged in an effort, in good faith, to ascertain the opinion of economists or to ascertain what economists hold a stated opinion.

4. They should be receptive to suggestions from officers of the Association designed to make their questions and statements, and the analysis thereof, conform to proper standards of competence and fairness.

5. They should be willing to indicate clearly, in using the returns, the nature and extent of the group to which inquiry was addressed and the nature and extent of the group which replied to the inquiry.

6. They should undertake to give no publication, except in a form satisfactory to officers of the Association, to the fact that they have received aid from the Association; and they should undertake to avoid any act or statement which might indicate that the opinions expressed represent the views of the Association.

B. The Association's aid should be given to private groups only

when, in the opinion of the President or the Secretary, the question upon which opinions are being sought is one of public importance.

C. Where these conditions are met, the Association should be willing to permit the use of its mailing list and, within reasonable limits of effort, to assist in making contact with economists expert in the field and in formulating questions or statements as clearly and fairly as possible. Such assistance should be given to all groups which meet the necessary conditions, without regard to the nature of the opinions which these groups are seeking to express or examine.

D. Officers of the Association should be free to take part in their individual capacity in preparing and answering any such private inquiries, but they should not do so in their capacity as officers. To this end, they should not be identified as officers of the Association in their signatures or in any publicity given to the returns unless such identification is accompanied, in a form satisfactory to the President of the Association, by a specific disclaimer of Association sponsorship or responsibility for their views.

Appendix

Tentative Plan for the Preparation of Statements on Public Policy

A Board of Editors, consisting of a chairman and four other members, should be appointed by the Executive Committee to hold office for a period of three years. The members of the Board should be chosen to represent, so far as possible, a variety of views upon public questions.

The Association should make available to the Board a sum of $10,000 for a period of three years, to be disbursed by the Treasurer of the Association upon instructions from the Chairman of the Board.

The powers and duties of the Board should be as follows:

1. To formulate questions of public policy upon which it is desirable to develop group statements of economic opinion, and to determine the composition of groups from which such statements are desired.[7]

2. To designate persons to participate in the preparation of policy statements and in the work of critical panels reviewing such statements, or to designate individuals who may take the responsibility for selecting groups and panels upon particular subjects.

[7] In developing such a program, it will be within the competence of the Board, in appropriate cases:

a. To seek to discover the scatter of opinion among a representative sample of members of the Association;

b. To seek to ascertain the degree of agreement among a representative sample of Association members or among groups selected for their special competence in a particular field of inquiry or for their adherence to a designated economic philosophy or point of view;

c. To seek to ascertain the degree of agreement in analysis of issues among designated groups of economists who disagree upon matters of policy; or,

d. To seek to develop mutually acceptable statements of the character of such disagreements.

3. To receive from members of the Association suggestions about statements which might be prepared and about persons or groups which might take part in such preparation.

4. To maintain general supervision over the work of groups engaged in preparing policy statements, in an effort to expedite this work and to assure its competence and fairness.

5. To receive draft statements from groups designated by it and from volunteer groups of members of the Association, to review such statements for competence, fairness, and cogency, and to approve worthy statements for publication.

6. To devise suitable procedures and public announcements, including announcements to appear in each published statement, which set forth the limit of the Association's sponsorship and make clear the nature and extent of the group whose views are expressed in the statement.

7. To arrange for publication of approved statements.

8. To provide suitable financial assistance for the work of groups and panels and for the publication of approved statements.

9. To provide facilities for criticism of statements after publication.

10. To obtain financial assistance from foundations or other sources in order that such work may be carried on.

11. To report annually to the Executive Committee, and, in the third year, to make recommendations as to the future of the program.

The Chairman of the Board of Editors should be the executive officer of the Board. He should be primarily responsible for establishing groups and panels, supervising their work, making arrangements with publishers and foundations, and authorizing disbursement of funds in accordance with the decisions of the Board.

Groups established by the Board to prepare policy statements should operate autonomously, developing their own procedures and making their own decisions. However, they should report to the Chairman of the Board, upon his request, the status of their work, and they should include in their membership any additional persons whom the Board might recommend. Any member of such a group or of a panel should be free to raise with the Board questions concerning the fairness of the work of the group, and the Board should have power to make inquiry, to issue appropriate instructions for reform, to discontinue financial support, and to withdraw recognition of the project.

The operations of the Board should be autonomous, subject to the right of the Executive Committee of the Association to determine annually questions as to scope and general policy and to make at any time such changes in the personnel of the Board as may, in the Committee's opinion, be appropriate to assure competence and fairness.

The Chairman of the Board should receive compensation, the amount of which should be determined when the scale of his duties becomes apparent. (The committee has tentatively in mind the sum of $750 a year.) Other members should receive necessary expenses but no compensation.

Decisions to set up groups for the preparation of policy statements and to publish policy statements should require the unanimous assent of members of the Board. All other decisions in the Board should be by a majority vote.

The Board should have authority to arrange for publication of a policy statement in any of the following ways:

A. By contract with a commercial publisher under an arrangement by which royalties or other payments, if any, will pass into the Association's treasury.

B. In a pamphlet series, sold at minimum price under the auspices of the Association and financed from the Board's funds or from foundation grants.

C. As a supplement to the *American Economic Review*, or in the *Review*, or in the annual *Proceedings* of the Association. When the latter forms of publication are used, the expense of publication should be divided between the Board and the *Review*, or between the Board and the *Proceedings*, upon terms mutually satisfactory to the Board and the Editor of the *Review*, or the Board and the editor of the *Proceedings*.

James Washington Bell
Eveline M. Burns
Joseph S. Davis
Theodore W. Schultz
Corwin D. Edwards, *Chairman*

DISCUSSION

Charles O. Hardy: The proposals for focusing the opinion of the membership of the Association in matters of public policy seem to boil down to three types of co-operative effort; namely, anonymous polls which are designed to ascertain and publicize the proportions of the membership or of selected groups of the membership who favor and oppose specific propositions; second, carefully prepared statements of one side of a controversial issue intended to be signed by as many members as possible and circulated in support of the position taken by the authors, and, third, pamphlets of educational character, signed only by authors who co-operate in their preparation. As to length and thoroughness of analysis, the first two—the polls and the statements of dictum—fall below the standard of a typical article in the *Review*, while the pamphlets fall, as to length, in the area between a *Review* article and a book.

In general, the number of economists involved tends to be an inverse ratio to the length of the product. The polls are valuable only if a very large number of people are canvassed; so that the percentages of Yes and No answers to individual questions are significant. The dictum statements have a narrower constituency of potential signers; first, because the list is limited to those whose answer is affirmative, and, second, because having more content in the form of supporting argument, the number of people who agree tends to be smaller.

I think we can agree that the Association can perform a useful service in connection with all three types of project by furnishing publishing facilities, whatever may be our judgment as to its useful role in the promotion and editorial control of the contents of the publications.

The purposes of statements on public issues of pressing current interest may be three: first, to exercise a direct influence on public action in the nearby future; second, to influence the thinking of economists with respect to the fundamental issues involved; and, third, to provide material for the study of the minds of the economists themselves. For the third purpose the polls may be very significant, if the coverage is large and the questions are carefully framed. From the standpoint of influencing public action the statements of dictum and the pamphlets both seem more promising than the polls. Public confidence in the competence of economists to pass on public issues is not so great that a mere statement that 75 per cent of responding economists are favorable and 25 per cent unfavorable is likely to carry great weight. A concise, well-reasoned, brief statement of conclusions, signed by an impressive list of economists, has an advantage over a pamphlet or book in that it will be read by a great many more people. At the same time it can contain enough argument to create some presumption on the part of the readers that the authors know what they are talking about. A pamphlet embodying a certain amount of research and a carefully-reasoned statement of the pros and cons is obviously more satisfactory from the standpoint of economists, but it has the double disadvantage that the time required for preparation is considerable, and the effort required of

the reader stands in the way of obtaining a broad audience. On the other hand, a pamphlet is often a source from which newspaper and magazine articles and editorials can draw material more effectively than from a briefer statement.

In my judgment both polls and statements of dictum should be undertaken and financed by interested parties rather than by the officers of the Association, but the Association may well furnish publication facilities and may stand ready to criticize the statements before their circulation, with a view to insuring that from the standpoints of clearness, fairness, and public interest they are worthy of space in the *Review*. When publication privileges are accorded, preprints or reprints can properly be furnished at cost to the interested groups.

When it comes to pamphlets, the administrative problem is more difficult, particularly the compensation of authors. *Review* articles can be prepared as by-products of teaching and research activity, and the preparation of books can be compensated for by prospective royalties, but good pamphlets fall in the middle ground where the work is apt to be too great to be undertaken without compensation and there is no prospect of significant royalties. However, if the Association starts in to finance the preparation of pamphlets not only will the financial burden be considerable but the administrative work of appraising applications, selecting authors, and editing the results could easily convert the Association into another research institute. My judgment is that it would not be wise for the Association to give financial support to such projects beyond publication cost, but that it might very well consider the establishment of a series of pamphlets to be sold at a price designed to cover costs of publication and distribution.

Material presented at these meetings affords illustrations of the first and third types. I have nothing to add to the discussion of polls, to which you have already listened. I think the material submitted by the Agricultural Committee is an excellent example of what I think of as the appropriate type of pamphlet. The question of agricultural price supports is analyzed thoroughly and ably and the document might well be considered for publication as an Association pamphlet. However, it also illustrates the reasons why the Association should not assume the degree of responsibility that would be implied in having pamphlets prepared by authors selected by officers of the Association. The paper was prepared by agricultural economists and is, I think, indicative of the thinking of that group rather than that of economists generally. For example, a group of economists representing what we may call the social welfare point of view would certainly arrive at a different recommendation respecting the method of distribution of the income supplements which are suggested as an alternative to price supports. The paper recommends that in a period when agricultural incomes are deficient (as measured from an objective standpoint) income supplements be distributed to farmers in proportion to their sales in the given year. This means that the highest incomes would warrant the highest supplements, and conversely. Economists approaching the problem from the standpoint of the welfare of the income receivers would probably suggest

a distribution in inverse ratio to income actually realized during the period of deficiency. A committee of business economists looking at the problem from the standpoint of sound financial administration would also reach a different conclusion, since they would point out that this system opens the door wide for financial management of a perfectly legal character designed to maximize sales in a period when supplements will be paid and minimize them the years just before and just after such periods. For instance, livestock producers might advantageously concentrate their sales very heavily in years when it appears certain that agricultural income will be deficient. Such concentration of sales would, if anything, aggravate the situation which necessitates the supplements. Or third, a group of economists representing the old school of liberalism would probably consider that inadequate attention has been given in the pamphlet to the basic question why anything should be done other than letting the price situation bring about necessary adjustments in production.

This point is not made with a view to minimizing the value of pamphlets which express the viewpoint of economists with a special background of training and a special sphere of interest. It does, however, point a reason why the Association, representing as it does all schools of economic thought, should hesitate to promote or sponsor the preparation of pamphlets. If it undertakes to secure a panel representing all shades of opinion as to all the issues involved, effective collaboration between members of the panel would probably be difficult to secure and the area of potential agreement might be narrow. On the other hand, to secure parallel treatments from different economic groups would obviously involve an impossible amount of work and expense.

I am quite in agreement with the statement in the report of Corwin Edwards' committee with respect to the services of the Association in providing editorship and dissemination of policy statements similar to its sponsorship of the *American Economic Review* or the annual volume of *Proceedings*, and with the standards set up as to the character of such publications. I question, however, the implication that some of the things there suggested cannot be accomplished in the *Review*. I would suppose that the *Review*, like the proposed publications, undertakes to concentrate on questions of current or prospective importance and to secure contributions which minimize the unimportant and fortuitous differences of opinion which contribute little to public understanding of great issues.

UNDERGRADUATE TEACHING OF ECONOMICS

The following reports and discussion relate to the work of the Committee on the Undergraduate Teaching of Economics and the Training of Economists, of which Professor Horace Taylor is Chairman. Specifically, the contents of this section concern the preliminary reports of the subcommittees on the Undergraduate Economics Curriculum and Related Areas of Study, of which Professor Mabel Newcomer is Chairman, and a discussion paper by A. B. Wolfe; a report by Professor W. W. Hewett on Some Problems in Teaching Elementary Economics suggested by the work of the Subcommittee on the Elementary Courses in Economics, by Professors Mary Jean Bowman and J. J. Spengler.

REPORT OF THE SUBCOMMITTEE ON THE UNDERGRADUATE ECONOMICS CURRICULUM AND RELATED AREAS OF STUDY

By Mabel Newcomer
Vassar College

I offer this report with some misgivings. Although I have been corresponding with the different members of the Subcommittee, there has been no meeting and few questionnaires have as yet been received. The following comments are, therefore, those of the Chairman rather than of the whole subcommittee, and are highly tentative. We hope that the discussion which follows will throw some light on the problems with which we are dealing and will open new paths for us to follow.

We have begun our study with one of the questionnaires that Professor Wolfe deplores; but I should like to reassure those who agree with him (and I am one of these) that the members of the subcommittee have shown no disposition to accept the existing pattern for their model. We have agreed, however, to begin with such facts as can be obtained.

The following summary is based on the practice of twenty-four institutions offering an undergraduate liberal-arts course. The number is too small for adequate sampling but I think that you will agree from your own experience that the practices described are widespread.

Most institutions offer an introductory year-course in economics covering both theory and institutions. This is typically a sophomore course. In only one-third of the institutions reviewed was it open to freshmen. This course is normally prerequisite to all or a great majority of other course offerings. Thus the undergraduate will not ordinarily elect specialized courses in economics before his junior year.

From this introductory course the curriculum spreads out, fanlike, to a great variety of specialized subjects, most of which have presumably been touched upon in the introductory course, and most of which are without other prerequisites. Having passed through this introductory year, the student finds the whole world of economics open to him.

The specialized courses tend to be half-year courses, although year courses are fairly common. The subjects offered are many. Even when

minor variations are ignored, at least forty distinct species appear in the institutions studied. The leading subjects are labor problems, money and banking, public finance, and economic history, in the order named. These are followed by accounting, statistics, international economics, and corporations. Neither economic theory nor the history of economic thought is among the first ten subjects offered, although they are well up in the first half of the total list.

The total offerings in the different institutions vary from the equivalent of six year-courses, as a minimum, to twenty-six as a maximum. The latter number, it may be noted, could not be covered by a student even though he were to devote his entire time to economics for five college years.

The typical major requirement in economics is the equivalent of five year-courses, with perhaps two more in related fields. There is, however, wide variation in the degree of specialization demanded. Specific course requirements for majors, beyond the introductory course, are rare and widely varied. Neither theory nor statistics has been selected for special emphasis, nor any particular institutional study. Seminars are commonly offered for senior majors, and occasionally required, but it is the method of study rather than the subject that seems to be emphasized.

Related studies in the major field ramble over the whole area of the social sciences and occasionally stray into the sphere of the sciences and humanities. A preference is shown for history, political science, sociology, and psychology, but philosophy, geography, and mathematics are frequently included.

What is the primary objective of this undergraduate economics program? The answer to this question is emphatically "training for responsible citizenship." Vocational or professional training, and preparation for graduate study—alternatives which were suggested when the question was asked—lag far behind. A few candid informants admit that no objective has been formulated by their departments, or suggest that training in disciplined thinking is the primary aim.

This summary of the undergraduate economics offerings raises many questions. First, has the science of economics developed far enough that some more logical sequence of studies than that now provided should be formulated? Or should advancement in the field be measured by methods of work (as in the usual senior seminar) rather than by subject matter? No answer to this question is suggested at this time.

Second, does the wide assortment of courses mean a rich educational offering, adapted to widely varying student needs, or is it an accidental development, the result, perhaps, of highly specialized interests of instructors—each offering a course revolving around his doctor's thesis? And is it an undesirable development leading to overspecialization for

the undergraduate course and a fragmentation of knowledge that only confuses the student? Could a simpler curriculum provide better for "responsible citizenship" and graduate study and vocational training too? The writer doubts whether student needs vary so greatly from one institution to another as to explain the widely varying course offerings, and is inclined to propose a thoroughgoing housecleaning; but our informants apparently would not agree. Most of those who replied to the question as to how they would revise their work if they were given a free hand proposed additional course offerings rather than subtractions.

Third, are related studies carefully chosen for major students, or are these more or less chance suggestions? The lack of agreement among the different institutions as to what should be included suggests that there are still wide differences of opinion as to what the responsible citizen should know. Also, there is little indication of integration of different disciplines through interdepartmental seminars or other courses.

Fourth, are methods of study satisfactory? Discussion groups combined with lectures prevail, with a few seminars and research projects for the senior year. Is this adequate? It is interesting to note that several departments report that they encourage field work or job experience and a scattering few actually provide such opportunities. This seems to be one of the newer trends and suggests that in time the social sciences may provide something comparable to the laboratory work of the sciences. It is not to be expected that such a trend will develop rapidly, however. Expense alone will prove a handicap. One of the great virtues of economics in the eyes of college administrators has been that it has been relatively "cheap to teach." This has been partial compensation for the disturbances it sometimes creates in public relations.

Finally, is economics beyond the grasp of the average freshman? Or are there other subjects that are more important for the first year? My own experience with freshmen in introductory economics convinces me that they are as capable of handling the material as second-year students; and far more eager. Is it perhaps that economics is still meekly accepting the position assigned to it years ago as a comparatively new and doubtful discipline?

It is the hope of our subcommittee that more definite answers can be given to these and other questions as our work progresses.

DISCUSSION

ALBERT B. WOLFE: I have been teaching economics for over forty years. Economics was much simpler in 1905 than it is today. For example, in all my student days at Harvard, I never heard of Walras or Pareto, or of a concept called "general equilibrium." Nor did anyone ever suggest that I read the last chapter of Malthus' *Political Economy*. Institutionalism, in the shape of Veblen's first two books, was only a wisp on the horizon, not an ominous cloud. There were no life-and-death politico-economic issues such as we face today; and such problems as there were, like control of the trusts and reform of the banking system, could be dealt with in accordance with established principles.

If economics was simple and orderly, so too the society into which education was to induct the youth was settled and comparatively static. We were safely ensconced in a capitalistic and, nominally at least, a Christian world. If a philosopher could write a book, as one did, on *The Finality of the Christian Religion*, most professors of economics believed with equal certainty in the finality of the laws of classical economics. If anyone had predicted that there would be a successful communistic revolution in Russia within a decade, or that England would go socialistic, even in a Fabian way, by 1945, he would have been set down as an ass. No crackpot had yet suggested that we were becoming a mature economy. Two world wars, the Great Depression, the New Deal, the atomic bomb, and John Maynard Keynes were still in the undreamed-of future.

The educational world was relatively untroubled. Vocational training was making some strides, but adult education was unheard of. What we then unblushingly called "liberal," and now call "general," education, had not gone into the discard, from which agencies like the Harvard Committee and various others are now trying to retrieve it. What Charles H. Cooley called a "heavy fall of commercialism" had not covered the arts colleges with a blanket of business and technical courses. Departments of economics were not yet converted into service departments for schools of commerce. Their role still lay in education for citizenship and intelligent living rather than in trade and professional training. Student enrollment was comparatively small and student bodies homogeneous. The assembly belt had not yet become an unavoidable feature of the mechanical pattern of a depersonalized process of mass education. There were still some things an educated person—any educated person—was supposed to know, certain intellectual facilities he was supposed to have, certain moral values of which he was supposed to be aware. In short, education was still broadly liberal and intellectual, but not demoralized.

Under such conditions the structure of an economics curriculum presented no great problems. Provide courses in a few definite fields—money and banking, corporations and trusts, labor problems, public finance, statistics, and American economic history—and you had an acceptable department.

Nor did the elementary course cause undue concern. It was based on an

accepted body of principles and a conventional selection of topics in applied economics—though what was applied was never quite clear. Textbooks still held to the good old honest order of production, exchange, distribution, and consumption—although they were hard put to it to find anything to say about consumption. A lot of young economists, who should have spent their spare time in familiarizing themselves with the other social sciences and social philosophy, if not in attempting a little economic thinking on their own, but who were attracted by financial prospects and egged on by competing publishers—who also multiplied like dragons' teeth—had not yet got out their scissors and pastepots, to create confusion but not much new light. Before the flood of "modern" texts, most of which are of such character that whichever one you attempt to use you wish you had used another, there appeared several texts which were for the time and within the limits of their classical frame of reference, excellent. It will be remembered that Taussig used Mill down to 1904, but within the next few years came Seager, Seligman, Fetter, the standard Ely, and in 1911 Taussig's own text. Marshall, Wright, and Field's *Materials for the Study of Elementary Economics* appeared in 1913, and solved the problem of collateral reading for some years. Economic and political events did not then move with the amazing speed of today. Consequently a book of readings was not out of date before it was off the press. Moreover, we were not then confronted with an embarrassing wealth of materials, topics, and problems, from which we now have to make selective choice and usually end by presenting altogether too many.

Nevertheless, even in those early days, thoughtful teachers perceived that the problem of aim and content was far more important than concern over the mechanics of classroom procedure and departmental organization —matters which, in my opinion, still claim entirely too much attention.

A well-attended conference on the teaching of elementary economics was held at the University of Chicago in 1909, and was followed in 1911 by a larger conference on the teaching of economics in general.[1] Through the ensuing years, there have been occasional round table discussions in Association meetings and sporadic minor articles in the *American Economic Review* and other journals. Only within the past two years, with the appointment and organization of our present Committee, have we started a sustained, organized frontal attack on the problems of the aims and content of the teaching of economics, as well as the training of economics teachers. There is a similar committee in the American Political Science Association. Our Committee cannot hope to get $60,000 and have its members freed from all other duties for two years. But I hope we shall proceed, on a broad front, and without expecting quick conclusions or results. Specifically, I hope we shall not rely much on questionnaires, which tend to emphasize mechanical details, and which in any case can serve only as reconnaisance

[1] Note should also be made of *The Teaching of Economics in Harvard University*, a report presented by the Division of Education at the request of the Department of Economics (*Harvard Studies in Education*, Vol. III, 1917). This was the first, and probably also the last, time a department of economics ever asked a department of education for a thoroughgoing critique, with no punches pulled.

surveys, never very accurate or meaningful. We should do our own thinking unimpressed by precedent.

The conclusions we arrive at and the recommendations we eventually make will fall short of real effectiveness if we do not betimes agree on an educational philosophy. This means in effect a social philosophy. And any social philosophy involves human values—evaluations of ends as well as of the instrumentalities by which ends are realized. I realize that this statement will not please those who think that Lionel Robbins has said the last word on the nature and function of economics.

Nearly all the early discussions ran in terms of aim and content. The issue was between the younger men whose aim was "orientation"—though I am sorry to say that orientation was thought of mainly in superficial factual and descriptive terms—and some of the older men, led by Professor Taylor, of the University of Michigan, who held to the eternal verities and the discipline of deductive logic. Here was an incipient dichotomy which later became the price economists and the institutionalists, now represented, at the extremes, by such texts as Boulding's *Economic Analysis*, and *Economic Behavior* by the New York University group. Controversy over content has continued all these years. We seem no nearer agreement than we were in 1912. Confusion in the world is reflected in confusion in education and specifically in the teaching of economics.

There has been too little thought about the *aims* of the teaching of economics. This, I think, is due to the fact that most teachers of economics have never been exposed to much thought on the philosophy of education and consequently fail to think of their work from a functional point of view.

The main task of our Committee is essentially job analysis. Why do we teach economics at all? What should be our aims in the teaching of economics? What content, in the elementary course and in the specialized courses respectively, is most suitable to these aims? What function in the educational process does the teaching of economics perform which cannot equally well or better be performed by some other subject? These questions cannot be answered until we posit for our own guidance what the main objectives of education in general are.

Even if we confine our thought to higher education, it is difficult to generalize. Are we considering the place of economics in general (that is, liberal) education, or its place in special and semitechnical education designed to train experts in vocations and professions? Do we, or do we not, assume a well-integrated and well-taught general course in social science—or social philosophy? In our graduate courses are we trying to train men and women for economic research, knowing full well that only a small minority of them will ever do any research to speak of, or are we trying to train them as broad-minded teachers with adequate perspective on human culture and insight into the human values which economic institutions may or may not serve? In considering the content and method of the elementary course, do we assume, usually contrary to fact, that most of our students will go on to advanced courses, or do we realize that one course in economics is all that

most students will ever get? Do we try to force our students into some one procrustean bed of approved course-content, or do we adapt our methods and to some extent our content to our students, according to their economic, social, and educational background? Are we, in short, teaching economics or are we teaching students? The distinction is of considerable pedagogical significance. There is some reason to think that every college or university should develop its own elementary course.

I would not push the idea of differentiation very far, however—only as an application of the old and sound principle that reasoning from the known to the unknown facilitates the learning process. I certainly do not subscribe to the idea that engineering, agricultural, commerce, and home economics students should respectively have courses of different basic aim and content.

One other question: Do we assume that economics is the most important subject in the curriculum? Were we, as I think we should, to expand our concept of economics to include analysis of the comparative values of ends as well as of instrumental means, there might be some ground for this claim. Even so, however, we have to remember that there are other essential constituents of a liberal education and that the student's time is limited. I much doubt whether the average undergraduate should take any of the semitechnical and specialized courses which fill our catalogues. I would hold to this idea even for the undergraduates who think they want to specialize in economics teaching and research as a life career.

Specialized or technical training in any of the fields of economics or any other field will in a sense take care of itself. It is relatively easy to train experts, of whom, of course, we need great numbers. But we need philosophers also. No number of experts can save democracy, or make available to us the deeper values that men live by. If we want to make freedom and democracy and "the good life" anything more than pious verbalisms, we must arrange our educational processes accordingly. It is not enough to pile up factual courses and detailed studies of technical economic instrumentalities without sustained analytical thought about the ends, proximate and ultimate, these instrumentalities are supposed to serve.

I would like to develop this line of thought but have not the time. Having in mind primarily the general introductory course or courses, I can only say that in my opinion a course in economics, or any other social science in the undergraduate area, which does not frankly and designedly bring to the student's attention the ethical, or value, implications of the subject matter is *Hamlet* with Hamlet left out. Our textbooks and our courses load the student with masses of historical and descriptive material, often without consistent organization, without any integrative principle of interpretation, and without any sustained analysis or any philosophical understanding of the meaning of it all.

We ourselves—some of us, at least—have been trained by teachers who decried "normative" economics, although normative economics is what they taught all the time, and who refused to consider human motives be-

cause they held, in complete error, that we do not know anything about motives. So, in our own fear of "value judgments," of "norms," of lack of "objectivity," of anything labeled "moral," we are passing up a magnificent opportunity.

For the very root meaning of "economy," as not only the purposeful management of resources but the rational choice of ends in order of their importance, is a meaning which can throw light on nearly every problem, relation, and institution of human life.

SOME PROBLEMS IN TEACHING ELEMENTARY ECONOMICS

By WILLIAM W. HEWETT
University of Cincinnati

I regret the inability of Professor E. E. Hale to attend this meeting as Chairman of the Subcommittee on the Elementary Course. Although I am appearing in his place, my remarks are presented as my own responsibility. Since returns of the excellent questionnaire prepared by Professor Hale are not as yet of sufficient volume to justify a preliminary report, I have selected a few issues that I believe most pressing for solution and, I hope, most suitable for an open-meeting discussion.

The current status of opinion concerning the content and method of presenting elementary economics reminds me of the unfortunate dilemma confronting John and Kate. This unhappy couple was unable to achieve its objective, marriage, because Kate would not marry John when he was drunk and John would not marry Kate when he was sober. The instructor in elementary economics, faced with an equally confused situation growing out of conflicting objectives, too often shrinks from a bold resolution of his dilemma and leaves the unfortunate student impaled upon a multiplicity of horns. After teaching the introductory course for twenty-five years, I am convinced that the chronic dissatisfaction with the first course can be traced to three sets of "horns." Stated in the form of questions, these recurring issues are:

1. Should the first year be devoted to so-called "principles" or should the emphasis be placed upon institutional-descriptive material?

2. Should the introductory course be aimed at the needs of the prospective major in economics or should the nonmajor be given primary consideration?

3. Should the content of the course vary with the objectives of the several colleges on a typical campus, or should the same introductory course be given to all students?

I realize there are many other important issues crying for discussion, especially in the category of classroom techniques. However, I find the above three practical questions confronting me year after year when planning the offerings of the economics department.

The first question is a hardy perennial, but it has become increasingly insistent in recent years because of the remarkable developments in economic theory and the glaring failure to digest, integrate, and simplify the new theory. Professor Wolfe called attention to this situation in his opening remarks. A few examples will establish the point. Imperfect competition theory may be overrated as an innovation, but its heavy emphasis upon the individual firm approach to price theory has

certainly revolutionized the teaching of that body of doctrine. The new has not been well integrated with the old; in most textbooks new theory has been forceably superimposed upon the traditional analysis.

The rebirth and vigorous development of the general equilibrium theory likewise has had profound influence, especially in the theory of international trade and cycle theory. Textbooks shift from partial to general equilibrium and back again with the ease of the man on the flying trapeze.

And finally, the Keynesian approach cast its shadow (or light if you so prefer) straight across the entire elementary course. Now the Keynesian theory basically runs in terms of aggregates used as analytical tools—aggregate incomes, production, investment, population, and the like. I see no essential conflict, but many attempts to present both approaches in an elementary text have been crude and confusing.

This is not the place to discuss the fascinating task that awaits a modern Alfred Marshall possessing acute powers for integration, synthesis, and simplification. I am merely calling attention to the fact that much of the grief in teaching elementary economics today is the unavoidable result of attempting to present at the introductory level a rapidly developing group of theories not yet digested at the stratosphere professional level.

Vigorous growth in the data and problems of applied economics parallel the development of theory. Public finance no longer means a study of raising and spending government income; nonrevenue objectives of economic control and stabilization dominate thinking in this field. The marriage of monetary theory and public finance has conceived a growing brood of offspring—illegitimate, or the new hope of the race, depending upon whether you follow the thinking of Professor Spahr or that of Professor Hansen! Labor relations, government and business, the international field—in every direction one turns there have been sweeping developments in applied economics.

Can the conscientious teacher give an honest training in economic principles and an adequate understanding of the intricate institutions and activities of modern economic life in one year? My answer is a flat, unqualified negative. And yet many of us have been unwilling to face the issue boldly. Texts and course content remain impaled upon the horns of dilemma. Each year we shut our eyes and minds, and write firmly for the catalogue, "This course covers economic principles and their application to current economic problems." One year should be devoted to the principles course and a second year to economic institutions and the problems of modern economic life—applied economics.

If this conclusion is accepted, then which course should come first? My second question, "Should the introductory course be aimed at the

needs of prospective majors in economics or should the nonmajors be given primary consideration," covers this point. In the College of Liberal Arts at the University of Cincinnati, only one in five students electing Economics I subsequently take a second course. In fact 50 per cent of the students in the present group are juniors and seniors. How should this situation influence our selection of course content? If the first course is concerned with principles, then about 80 per cent of our students will never study such issues as the C.I.O. versus the A.F.L., the income tax versus the sales tax, the regulation of public utilities, and the problems of unemployment and social security. On the other hand, if one accepts preparation for citizenship as the chief objective and gives current economic problems the center of the stage, then, in my opinion, he must surrender the basic function of economic science; namely, the study of the economic process *as a whole.* The latter step I refuse to take. In later years the student will accumulate considerable information on labor relations, taxes, and social security, both from the news and from daily working experience. But the student who graduates without good training in the fundamental principles of economics will never again come into contact with economic science. I believe it is my responsibility as an economist to make certain that the student who faces me only once in the classroom will carry away the best training in the principles of economics that it is within my powers to supply. I cannot do that and make him a generally informed citizen in one year. I will have several chances to work on the student who majors in economics, but for the nonmajor, Economics I is my only chance. I do not intend to throw that chance away.

Now my third and last question, "Should the content of the first course vary with the objectives of the several colleges on a typical college campus?" To analyze this question we must distinguish between a shift in emphasis and a change in substance. In the Commerce College at Cincinnati, for example, the course in elementary economics is given in the second year. It is preceded by a year's work in accounting and is followed by a number of required courses such as money and banking, corporate finance, and labor problems given in the last two years. Clearly this array of work, required of all students, must be taken into consideration in the teaching of elementary economics. The coverage of subject matter is, in substance, identical with the Liberal Arts introductory course, but the emphasis is correctly quite different. Some topics are expanded while others are contracted, both in assigned reading and time allotted in the classroom. While I am without personal experience in other types of professional schools, I would expect this sort of adjustment in emphasis would not be uncommon.

Substantive changes in content are quite another matter. The en-

gineering college may introduce extended material on business management, industrial integration, and government regulation of industry, while all but very elementary price and distribution theory may be omitted. Teachers' colleges frequently give a course that could better be called "economic problems of the citizen" and courses in schools of household administration may be heavily weighted with marketing and consumer problems. I agree with Professor Wolfe that such differentiation is a serious mistake. A study of economic principles should be part of the education of every student, irrespective of the college in which he is enrolled. Any special requirements arising out of professional objectives should be satisfied in other courses designed for such objectives.

I am sure there will be wide differences of opinion on each of the questions I have raised in this brief paper. While my own convictions are strong, I freely admit there is much to be said on each side of all three issues. My plea is that we cease straddling and make definite decisions one way or the other. Having unbounding faith in the importance of sound education in economic principles, I believe two years should be required of all college students. In closing, may I urge you to give your best thought to the questionnaires you have received and return them promptly to Professor Horace Taylor at Columbia University. From the wide experience of our membership we should be able to reach conclusions of practical value and improve the teaching of economics in the chaotic years that are ahead.

DISCUSSION

Mary Jean Bowman: In his emphasis on course content, I am heartily in accord with Professor Hewett's approach. Also the three major questions that he poses are certainly critical ones. However, I find that to present these as central issues is relatively sterile. Taking a different starting point, therefore, I shall incidentally indicate my conclusions—or opinions—with respect to his three questions. I should like to state at the beginning that my attempts to condense this discussion have inevitably led to a rather dogmatic statement of some points at which I am less certain than might appear.

It seems to me that there are four questions that must be answered as a basis for evaluating the problems and possibilities in introductory teaching. I will consider them in turn:

The first question is: What are the chief purposes served by economics as a field of knowledge and of study?

On this point I believe we would find a near-universal agreement by members of the profession; i.e., that economics is primarily a *social* study, the importance of which derives from the contribution it can make to the understanding and solution of social problems. This implies that training in economics is first and foremost training for citizenship, whether that citizenship is to be exercised professionally or on a lay level. It implies also that business training, for private profit making, must be distinguished from training in general—or should we say in social—economics. Business economics cannot in any sense be substituted for general economics, or vice versa, however much the subject matter of the two may overlap.

Another purpose of the study of economics might be mentioned; i.e., training in scientific discipline, in a field in which many persons begin with emotional preconceptions and in which laboratory techniques are not available. Such training is accomplished only when the students become aware of the character and limitations of the methods of economic analysis. As an end purpose I consider this decidedly minor. However, as I shall attempt to show later, I believe it to be an indispensable prerequisite to the accomplishment of the citizenship purpose.

From these answers to my first question follows my second: What are the ways in which "theoretical" and "institutional" knowledge contribute to the formulation of public policy?

In answering this question it is necessary to distinguish between the detailed factual information needed in a particular case and the basic techniques and tools available for meeting problems. It must be evident that no course or series of courses in economics can provide the mass of detail that would be needed in dealing with all-important current economic problems—not to mention problems that will arise in the future. I assume, therefore, that even the most "institutional" economist will make no such attempt. This question then takes the form: What kinds of background are provided by economic knowledge as the foundation from which each particular concrete problem—broad or narrow—may be approached?

Economists in America have gone through a period of struggle between the so-called "institutional" and the "theoretical" schools; but despite an occasional flare-up here and there, this polarization of attitudes has largely disappeared among the advance guard of the profession. It remains to harass us at the level of introductory teaching for a number of reasons—some of them indicated by Professor Hewett. However, I am convinced that even at this level the apparent conflict is largely due to misconceptions concerning the character of each approach to economic problems. Theoretical analysis contributes to the understanding of the operation of the economy only insofar as its models approximate significant aspects of concrete reality; that is, of the operation of economic institutions here and now. On the other hand, a detailed descriptive analysis has no carry-over from one problem to another and even the most extreme "institutionalist" must distill out significant elements from the infinite detail of economic life. Only thus can the human mind attain to any comprehension, and only thus can institutional analysis make any contributions to policy formation beyond *ad hoc* decisions. Such distillation means the creation of models that are, at the least, theory in embryo. Thus theory put to work for the understanding of the economy approaches institutionalism, and institutionalism put to work contributes to the theoretical tool chest. We then find ourselves arguing about inductive versus deductive theory, and our basic problem is laid out clearly before us; i.e., the integration of the two. Both together contribute to the formulation of public policy through the understanding of economic processes and of the kinds of developments that may be latent in given problem situations.

Theory contributes also in quite another way. It assists in the more precise defining of social norms, such as the maximization of production and the attainment of an optimum allocation of resources. It thus provides guidelines for the development of policy measures. This is a fact too little recognized. I am sure that the most vociferous exponents of traditional institutionalism would say that in taking this position I was merely emitting a few last defensive gasps on behalf of the dying body of Marshallian economics. Others will accuse me of making value judgments, thus forsaking objectivity. I deny both these charges, but time prevents me from going into the evidence for my case.

My third question is this: What are the major resistances of new students to the acquiring of economic tools for use in the exercise of citizenship?

The answers to this question will vary in emphasis with the background of the student body involved. Nevertheless, I suspect that my experience has been commonly repeated in the experience of other teachers. I have found resistances to the acceptance of a basically social point of view, and to the development of a sense of social responsibility. At the same time, many students are quite unprepared to recognize validity or objectivity in *any* tools of analysis applied in an area of study in which controlled experimentation in the pattern of the natural sciences is unattainable. This is aggravated by the fact that economists frequently put forth ideas that conflict with students' preconceptions (a difficulty particularly important

among men whose economic preconceptions are generally the more fully developed). And students may quite reasonably distrust us on the grounds of our patent failure to solve many of the contemporary economic ills of the society—particularly that of employment. In all of these resistances the students reflect the adult communities from which they come; much of the resistance is subconscious, taking the form of a blocking of the mind to open examination of the materials presented in text or classroom. In addition, student resistance sometimes covers an unconscious (or even a conscious) recognition of the inconsistencies and the fuzziness in the course content, or of our failure to bring out the "so what" of a considerable section of the course. Such resistances can frequently be distinguished quite readily from the other types, and they are a clear indication that something is seriously wrong with the teachers or the state of economic thought as a whole.

Turning now to our final question, we may ask: How can students best be taught the most basic tools of economics and how to apply them?

In my opinion the following must be done:

1. The normative setting in which economic analysis comes to be used in practice must be discussed. Properly handled such a discussion will contribute to the social interest of the student, to his understanding of some of the methods of economics, and to his appreciation of the value of economic study.

2. The selection of tools to be taught in the first year must be such as to give students a broad idea of the range of theoretical models and other techniques available in the study of economic problems.

3. These tools must be applied in examples that are of central importance, and the applicability of different types of tools to different types of problems must be analyzed to some extent.

4. Students must be shown the basic limitations of economic analysis at the present time, and this must be done through current illustration. This procedure will involve some consideration of the reason for the inadequacy —whether it may be regarded primarily as due to immaturity in the field of economics itself, or to the relative magnitude in the problem of factors best analyzed from a background in some other aspect of social science; e.g., political science or sociology.

5. The normative as contrasted with the descriptive and explanatory uses of economic theory in policy making must be brought out by illustrations.

Coming back now to Professor Hewett's paper. He has presented the teaching of principles versus the teaching of institutional materials as the horns of a dilemma. I would argue that neither horn is tenable and that anyone who attempts to make such a choice will indeed become impaled in a most uncomfortable position, one from which he is powerless to do anything effective in training for citizenship. The tools of analysis cannot be mastered unless the student has some practice in their application. This can be accomplished only as the gap between the institutional and the theoretical fronts is closed.

As to whether the introductory course should be aimed primarily at

majors or nonmajors, I am unconcerned. For one thing, who will be a major frequently depends in considerable measure on reactions to the introductory course. More important, I would teach the two groups essentially the same course even if they could be definitely segregated. Even for that small minority of majors that might take to a highly abstract, deductive analysis in the introductory course, I believe some antidote that will force attention to the relation between theory and policy is highly desirable.

I am substantially in accord with Professors Wolfe and Hewett in their position concerning the teaching of general economics in the professional schools.

What, then, are the major problems confronting us in the teaching of introductory economics? I submit that they are identical with the basic problems confronting economists at more advanced levels in the integration of their thinking and the filling in of gaps. At least two weddings are called for before introductory teaching can be satisfactory. These are: a marriage of deductive and inductive generalization and a marriage of the insights provided by static value-distribution theory and the insights provided in the analysis of business fluctuations and levels of employment. The first pair have progressed to the point of becoming engaged, but between the second pair there are few signs that even a courtship has commenced. Perhaps the Stockholm school will prove to be the matchmaker. Perhaps the answer lies in the development of the analysis of uncertainty, where Professor Hart sees so much hope. Certainly a gap exists today that seriously hampers the effective teaching of introductory economics.

It is unfortunate that so few of the leading lights in economics in this country have taken any interest in the problems of introductory instruction. I do not have time here to go into a consideration of some of the reasons for the contrast between European and American scholars in this respect. However, in view of the kinds of problems that are most urgent in the teaching of introductory economics today, it is certainly desirable that the best minds in the profession should be brought to bear on the problems of the introductory course.

JOSEPH J. SPENGLER: In the time at my disposal I cannot add much to what has been said, nor can I give as much precision and body to my remarks as I should like. If you will allow me to indulge in hyperbole, I can suggest how our curricula have become what they are. The usual undergraduate economics and business curriculum—and the usual college curriculum for that matter—is remindful of a cumbersome and slum-ridden city. In considerable measure both are the products of conflicting special interests which, having given rise to a large amount of planlessness, insist upon freezing the ugly and asymmetrical structure that results. To illustrate: Suppose that someone writes a doctoral dissertation on marketing falcons in Laputa. The probability is greater than small that a textbook and a course will come of it. Suppose they do. An economist, situated in another institution and desirous of that honorific distinction which differentiation yields these days, discovers this textbook, introduces a course

based upon it, and, after having added some pedestrian matter on jackdaw distribution in Laputa, transmutes his class notes into a textbook. We now have two courses and two textbooks; whence the publishers become alert. And so the course spreads in the manner of a worm-snake over the whole collegiate terrain, ever and anon begetting yet more textbooks, until it has become inextricably wedged in both the curricular and the publishing worlds. And there it remains; for like the evil king of old, a useless course seems never to die. Now suppose that other courses on other aspects of Laputan economic life evolve and spread in like wise. Soon there can be found everywhere an amalgam of offerings sufficiently slodgy and sufficiently unrelated to the real and lifelong needs of the student to bear many of the earmarks of some of our curricula. I exaggerate of course; yet my remarks do not wholly misrepresent what takes place.

Curricula become the shapeless things they are because they are not permeated by a unifying principle, and because their construction is not dominated by a unifying mind or by a unifying scheme of values. Their shapelessness but reflects the incoherence and directionlessness which striate the contemporary value and cultural scheme. For when men do not know what they want, and when "futilitarians" consider any one course to be as good as any other, every man becomes his own course maker, and chaos results. It does not follow that a monolithic scheme of values must be imposed, or subscribed to; it follows, rather, that we must discover the unity that exists even in present-day diversity and allow this unity to infuse our curricula.

Let us suppose that we have discovered unifying elements in terms of which we would construct a satisfactory curriculum. We must then formulate the total objective of the four-year undergraduate college program and, given this objective, so distribute the fixed quantum of resources at the disposal of the student—about 120 semester hours—in accordance with the marginal principle as to maximize the degree to which this objective may be realized. Suppose we define the objective—as we may safely do for students other than those whose purpose is immediately and predominately vocational in character—to be a rough conversancy with the content of modern knowledge. We thereby limit to a maximum of 30 to 40 semester hours that portion of the program of an undergraduate economics major student which may be devoted to economic subjects. Our task then becomes one of classifying the body of fundamental economic knowledge and of organizing its presentation in such manner as to communicate it to those students who are capable of comprehending it. Our problem is both surgical and dietetic in character: we must eliminate those barrels of lather which masquerade as courses and at the same time build up the solid and real content of courses indicated for retention.

Suppose we are allowed 30 semester hours for the communication of the body of economic knowledge. How may we proceed? I cannot answer this question fully, but I can suggest how one might answer it effectively. Three hours ought to be set aside for accounting and 3 for statistics, for students should know the grammar of business and the quantitative instruments of

economics; and they can get a fair grasp of these matters if the two courses in question are efficiently constituted, and if the students themselves are aware of the overwhelming role of number in human affairs.

The body of economic knowledge proper must be compressed, through compactness of treatment and through minimization of duplication, into the 24 semester hours that remain. This may be accomplished in several ways. For example, the amount of time devoted to certain components of the 6-hour introductory course (e.g., marginal analysis, combination of factors, distributive "shares," "orientation") may be reduced so that the student may get from the elementary course subject matter (e.g., on the location of economic activities, the role of the corporation, etc.) which he now gets in advanced courses. If such an arrangement is put into effect, 9 hours should suffice for advanced instruction in marginal analysis, price theory and practice, money and banking theory and practice, determinants of levels of economic activity, fiscal theory and practice, labor and related problems, the pure theory of economic organization, the economic functions of the state, and "economic systems." In the fourth year 6 hours should be devoted to economic history and institutional analysis: here there should be emphasis upon (among other things) such matters as economic growth and form, economic patterns, elements making for variability and elements making for constancy in economic affairs, the place of accident and the role of the individual in economic activity and development, the workings of economic ideas and principles in the stream of history. Finally, a 3-hour residual course may be set aside for the consideration of matters which, although of contemporary significance, are not adequately dealt with elsewhere in the program.

Curricular changes cannot, of course, render the method of approach unimportant. It is essential that the interconnectedness of economic subject matter, together with the interconnections obtaining between economic and noneconomic matter, always be stressed; for if this is done a considerable synthesis of subject matter—so important in this age of decomposing specialization—can be achieved. In all courses full use should be made of the analytical tools and the apparatus of thought initially introduced in the elementary and in the instrumental courses. The administrative implementation of economic principles should always be striven after; for then the student will acquire a feel for translating abstract principles into action. Most important of all, the student must be made adept in the use of economic materials and sources of economic information and thereby fitted to continue the education of himself.

Specialized work leading to a degree in business administration may be dealt with along the lines already indicated. (I do not refer here to the body of technical training required for such a professional degree as the C.P.A.; this training should be adequately supplemented by courses such as I have described.) It is preferable that intensive training in business administration be sought at the master's level. But for many this is not feasible. It is desirable, therefore, that the entire content of present-day undergraduate business administration courses be compressed into three categories—

production and managerial problems, marketing and pricing problems, and financial problems—and communicated to students in 9 to 12 hours, in part through use of the problem method. If this arrangement is introduced, chaff courses can be done away with and the business administration major can concentrate upon about 30 hours of significant subject matter in addition to that relating to business administration; should he need 9 instead of 3 hours of accounting, this need may readily be accommodated.

Because their main interests lie elsewhere, many college undergraduates cannot devote 30 hours to economic subjects; yet they need a reasonably rounded training in economics. These students should not be admitted into the elementary course if a more satisfactory alternative can be provided. Preferably, there should be provided for these students at the junior-senior level a 6- to 9-hour course (9 hours if at all possible) designed especially to meet their needs; into this course there should be compressed as much *significant* economic material as can be gotten into 6 to 9 hours.

It may be objected that many students are incapable of undergoing so intensive a regime of economic study as the program outlined contemplates. This objection has merit; but it constitutes no defense of shoddy, present-day curricula. For students of limited competence—and of these there appear to be a considerable number—there may be established a simple 6-hour course suited to inculcate economic common sense, economic rules of thumb, and economic moral principles. It would be the function of such a course to provide instruction and training intended to make for economic efficiency and for economic and communal order and continuity—in short, to fit the student for *co-operative* life in the economic *community*.

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AMERICAN ECONOMIC ASSOCIATION

PROCEEDINGS OF THE FIFTY-EIGHTH ANNUAL MEETING

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PROCEEDINGS OF THE AMERICAN ECONOMIC ASSOCIATION ANNUAL BUSINESS MEETING, JANUARY 26, 1946, HOTEL CLEVELAND, CLEVELAND, OHIO

The business session of the 58th Annual Meeting of the American Economic Association was held at Hotel Cleveland, Cleveland, January 26, 1946, at 5:00 P.M., President Sharfman presiding.

President Sharfman reviewed the circumstances under which improvised business meetings had been held since 1941 when the last formal meeting, national in character, was held in New York City and called for a vote ratifying the actions taken by the Executive Committee during this interval. Action was taken to this effect by approving the minutes as printed in the *Proceedings* of 1942, 1943, and 1944.

The Secretary-Treasurer (J. W. Bell) presented highlights of the Association's activities—covering the events of the past four years—in a report on "Where the Association Stands." A fuller treatment of these activities may be found in the following reports printed in these *Proceedings:*

Report of the Secretary, page 870.

Report of the Treasurer, page 887.

Report of the Finance Committee, page 890.

Report of the Auditor, page 895.

Report of the President and Secretary on Long-run Financial Policy of the Association, page 892.

"What the *Review* Aims to Be" was the subject of Professor Homan's discussion of the editorial problems and policies of the *American Economic Review.* The Managing Editor's report and budget for 1946 are printed in the present volume, pages 900–903.

In the absence of E. G. Nourse, Chairman of the Special Committee on Honorary Members—Foreign, J. W. Bell discussed the Association's policy concerning the selection of this class of members and submitted the Committee report. (See page 908.)

The report of the Committee on Honors and Awards to American Economists, submitted by S. H. Slichter, may be found in these *Proceedings,* page 909.

Other reports referred to and which are printed in the *Proceedings* are the following:

Report of the Subcommittee on Book Reviews (H. S. Ellis, Chairman), page 904.

Report of the General Committee on Republications (H. S. Ellis, Chairman), page 907.

Report of the Committee on Economists in the Public Service (M. A. Copeland, Chairman), page 911.

Progress Report on Source Book of Economic Statistics (M. A. Copeland, Chairman), page 934.

Final Report of the Committee on Development of Economic Thinking and Information (J. J. Spengler, Chairman), page 922.

Report of the Committee on Research (S. E. Leland, Chairman), page 918.

Report of the Subcommittee on Consensus (C. D. Edwards, Chairman), page 832.

Report of the Committee on Undergraduate Teaching of Economics and the Training of Economists (Horace Taylor, Chairman), page 937.
Social Science Research Council (J. J. Spengler), page 944.
American Council of Learned Societies (F. H. Knight), page 947.
National Bureau of Economic Research (D. H. Wallace), page 945.

The results of the mail ballot for the election of officers and of the referendum on the Association's representatives to the learned councils and the National Bureau of Economic Research were reported by J. D. Brown, Chairman of the Nominating Committee. President-elect E. A. Goldenweiser was introduced and he graciously responded with a few appropriate remarks.

The certification of election by the Secretary follows:

In accordance with the bylaws on election procedure, I hereby certify the results of the recent balloting, and present the reports of the Nominating Committee and the Committee on Elections.

The Nominating Committee, consisting of J. Douglas Brown, Princeton University, Chairman, Milton Gilbert, Bureau of Foreign and Domestic Commerce, Bernard F. Haley, Stanford University, Ben W. Lewis, Oberlin College, Mabel Newcomer, Vassar College, and George W. Stocking, University of Texas, presented to the Secretary the list of nominees for the respective offices:

For President
Emanuel A. Goldenweiser
For Vice-Presidents
Carter Goodrich
Simon Kuznets
Edward S. Mason
Edwin E. Witte

For Executive Committee
J. Frederic Dewhurst
Seymour E. Harris
Theodore J. Kreps
Clair Wilcox
For Social Science Research Council Representative
Norman S. Buchanan
Ralph A. Young

The Committee on Elections (John K. Langum, Chairman, Henry B. Arthur, and James Washington Bell) prepared biographical sketches of the candidates and ballots were distributed early in December. The canvass of ballots was made on January 18, and the results were filed with the Secretary.

From the report of the Committee on Elections, I have the following information:

Number of envelopes without names for identification	8
Number received too late to count	79
Number of defective ballots	—
Number of legal ballots	1,331
Number of returns from the mail ballot	1,418

On the basis of the canvass of the votes cast, I certify that the following persons have been duly elected to the respective offices:

President (for a term of one year)
Emanuel A. Goldenweiser
Vice-Presidents (for a term of one year)
Carter Goodrich
Simon Kuznets
Members of the Executive Committee (for a term of three years)
Seymour E. Harris
Clair Wilcox
Representative to the Social Science Research Council (for a term of three years)
Norman S. Buchanan

The results of the referendum for changing the procedure for selecting council representatives were as follows:

For	780
Against	242

JAMES WASHINGTON BELL, *Secretary*

President Sharfman announced the deaths during the past year of two past presidents of the Association and memorials were read on John Rogers Commons, by Selig Perlman (read by Philip Taft), and on Edwin Walker Kemmerer, by S. E. Howard. After the reading of each memorial, it was adopted by a rising vote and ordered to be spread upon the record[1] and sent to the family and institution of the person memorialized.

Dr. A. R. Upgren reported for the Committee on Resolutions as follows:

WHEREAS, The members of the American Economic Association, meeting in the fifty-eighth annual session, January 24–27, 1946, in Cleveland, Ohio, meeting under the happier conditions of a convention-in-person instead of a convention-in-print, desire to record their gratitude for the services of those who have contributed to the success of the meetings; therefore, be it

Resolved, That the Secretary be instructed to extend the sincere thanks of the members of the Association to President I. L. Sharfman, and those upon whom he called for assistance, for the very interesting program, and to all participants for their co-operative assistance; and be it further

Resolved, That we extend thanks to the officers and members of the several associations concurrently meeting for the opportunity to share in their interesting programs; and be it further

Resolved, That we extend thanks to Daniel A. Hill and Robert L. Davison, of the Ohio Public Service Company, and Russell Weisman for their help in making the local arrangements for the meetings; and be it further

Resolved, That we extend to the management and employees of Hotel Cleveland and of the Cleveland Convention and Visitors' Bureau our appreciation of their services during the meetings.

ARTHUR R. UPGREN, *Chairman*
ARTHUR BURNS
J. MARVIN PETERSON
THEODORE O. YNTEMA

Adjourned.

[1] Published in the September, 1945, and the March, 1946, numbers, respectively, of the *American Economic Review*.

REPORT OF THE SECRETARY FOR THE YEAR 1945

The following report includes minutes of the Executive Committee, together with brief comments on some of the activities and operations of the Association during the past year.

1. Minutes of the second meeting of the 1945 Executive Committee:

The second meeting of the 1945 Executive Committee was held at Princeton Inn, Princeton, New Jersey, April 19–20, 1945. The meeting was called at noon and was continued throughout the afternoon and evening of the 19th and morning and afternoon of the 20th, adjourning at 3:45 P.M. on the latter date. The following were present: President Sharfman, presiding, Bell, Burns, Davis, Edwards, Ellis, Fetter, Groves, Machlup, Nourse, Shoup, and Taylor and, by invitation, Knight, Leland, and Spengler. Messrs. Schultz and Wolfe were absent.

1. *Minutes of Meetings of February 1–2, 1945.* The minutes of the second and third meetings of the 1944 Executive Committee and the first of the 1945 Committee were approved as set in galley proof with minor emendations; viz., indicating a separate, namely, the first, meeting of the 1945 Executive Committee upon President Sharfman assuming the chair; the inclusion of J. W. Bell as member of the Finance Committee; and an alteration concerning the minutes on the Hartkemeier-Homan matter.

2. *Publication Reports.*

a. *March Review* (*Fritz Machlup*). Professor Machlup commented on the contents of the March *Review*, and indicated that the cost of this issue would exceed one-quarter of the annual budget, owing chiefly to the increased number of copies printed. He read a letter from A. G. Hart concerning the Editorial Board and the function of its members. It was suggested that meeting of the Board be held, but Dr. Machlup indicated that he did not feel the need of such a meeting now, especially in view of the prospective early return of Professor Homan.

b. *1945 Proceedings* (*J. W. Bell*). Professor Bell reported informally on the contents and make-up of the *Proceedings* and explained the reasons why the *Proceedings* must appear this year as a separate issue in May rather than as an accompanying volume to the March or to the June issue of the *Review*.

3. *Reports of Continuing Committees.*

a. *Economists in the Public Service* (*M. A. Copeland*). A wire was received from Dr. Copeland to the effect that he was still trying to clear information with Commissioner Flemming of the United States Civil Service. Professor Nourse remarked that the Public Administration Committee of S.S.R.C. (Professor Short's report) had received a request from Commissioner Flemming that a counseling committee be appointed to discuss with the civil service representatives ways and means of improving standards of social scientists in the public service.

b. *Honors and Awards* (*S. H. Slichter*). A letter from Professor Slichter, Chairman, indicated that little further progress had been made and the Committee was continued with the expectation a report would be forthcoming at the next meeting of the Executive Committee.

c. *Teaching of Economics* (*Horace Taylor*). The consideration of this report was postponed to Friday when a report was received from Professor Taylor, indicating that the roster of members of the subcommittees had been completed and that procedures for their operations had been set up. A budget of financial needs called for at our last meeting was not forthcoming but it was indicated that such a budget proposal would soon be made. It was voted to accept with appreciation the report of the work done by this Committee.

4. *Reports of New Subcommittees of Executive Committee.*

a. *Honorary Members—Foreign* (*E. G. Nourse*). Professor Nourse submitted a nine-point report, supplementing the report made at our February meeting and published in the May *Proceedings*. It was voted to adopt and publish the report as amended.

b. *Book Reviews* (*H. S. Ellis*). Professor Ellis submitted a report, together with a draft of suggestions to reviewers. In connection with the discussion of this report, Professor Machlup read a critical letter from Herbert Feis.

It was voted to adopt the report as amended and the Committee was continued with the request that further suggestions be submitted at the next meeting.

c. *Research* (*H. M. Groves*). Professor Groves reviewed the recent history of the Association's activities in setting up a Committee on Research, indicated what might be done, but expressed grounds for skepticism concerning fruitful results.

After a protracted discussion of Professor Groves's report, two exploratory committees were set up: one, a standing committee on economic research and the other, a special exploratory committee on the contemporary development of economic thought and information. The action covering these matters follows:

It was voted that the representatives of the American Economic Association on the Social

Science Research Council and the National Bureau of Economic Research constitute hereafter a standing Committee on Economic Research; that its duties be: (1) to co-operate with the Social Science Research Council and other associations in promoting economic research; (2) to discover or develop new promising research projects and seek ways and means of securing financial support for such projects; (3) to make suggestions of ways and means of improving economic research; that the President of the Association designate a chairman from among the members of this Committee; and that the Committee have the privilege of increasing its membership by not more than three additional members. Professor S. E. Leland was appointed Chairman of this Committee, the other members being E. G. Nourse, J. J. Spengler, and D. H. Wallace.

The following resolution was adopted:

That the project for periodic reports on the development of economic ideas and data be regarded as separate from any general exploration of research problems; that as a first step in this project a volume be prepared, summarizing the development of economic thinking and information since 1939, this volume being regarded as an experiment in a technique which might be used for subsequent similar periodic reports; that a committee be appointed to formulate a plan for this volume—that is, to determine its scope and timing and make recommendations as to its editor; that the President be empowered to approve the proposal, to appoint the editor, and to delegate to him full charge of the preparation of the volume; that upon the appointment of the editor, the committee become an advisory committee to him and that the cost of the project to the Association shall not exceed $5,000. To develop the project authorized by this resolution, President Sharfman appointed a committee consisting of J. J. Spengler, Chairman, C. D. Edwards, and E. M. Burns, with other names to be added if enlargement of the committee is deemed to be desirable.

d. *Committee on Consensus Reports.* A tentative agenda for the subcommittee submitted by Professor Edwards was received, and it was voted to authorize the appointment of additional *ad hoc* committees to continue the experiment on consensus reports, provided, however, that such *ad hoc* committees receive the approval of the President.

5. *Report of Nominating Committee.*

a. *Nominations for 1946.* After dinner the members of the Executive Committee and the Nominating Committee reconvened as an Electoral College to consider the panel of names submitted by the Nominating Committee for president for the year 1946. There were present the members of the Executive Committee and the following members of the Nominating Committee: J. D. Brown, Milton Gilbert, B. F. Haley, B. W. Lewis, and G. W. Stocking. (Mabel Newcomer absent.)

b. *Methods of Selecting Representatives on Councils.* The President and Secretary were authorized to formulate necessary amendments to the Charter and Bylaws of the Association so as to permit the nomination of our representatives to the Councils (S.S.R.C. and A.C.L.S.) and the National Bureau of Economic Research by the Electoral College in the same manner in which the president is now nominated. A revision of Article III, Section 2, which would effect the change was submitted for the consideration of the Executive Committee.

In the course of the discussion it appeared to be the consensus that the Council representatives should be excluded from the list of elective offices altogether, and the President and Secretary were instructed to prepare appropriate amendments to submit to a vote of the membership on the next mail election ballots. (This involves a slight change in Article III, Section 1, eliminating from the officers who shall be elective officers "three representatives on the Social Science Research Council and two representatives on the American Council of Learned Societies." It also involves a change in Article III, Section 2, to indicate that these representatives be selected by the Electoral College.)

6. *Deliberation and Action of Electoral College.* The panel of names submitted by the Nominating Committee for the office of president was discussed and the nomination for president was made.

7. *Questionnaire on Association Plans for 1945.*

a. *Character of Meeting (J. W. Bell).* Professor Bell summarized the results of the first 550 questionnaires received in answer to I. L. Sharfman's circular concerning those questions dealing with the place, time, and character of meeting for 1945.

b. *Character of Program (I. L. Sharfman).* The balance of the session was devoted to a discussion of Professor Sharfman's report on the character of the annual program and the suggestions which were made on the basis of his analysis of the questionnaires.

8. *Tentative Proposals for Meeting and Program.* President Sharfman submitted a memorandum on tentative proposals for the 1945 meeting and program which involved the preparation for a national meeting of the customary character, to be held at a time and place to be subsequently determined, either during the Christmas holidays of 1945 or shortly after January 15, 1946. If such a meeting should prove to be in conflict with governmental policy, a meeting, presumably in Washington, would be held on substantially the same restricted basis as the 1943

meeting and the meeting planned for 1944. Failing to receive governmental approval for such a plan, the meeting for 1945 will be canceled altogether and the prepared program will be published as a volume of the *Papers and Proceedings*.

Authority to schedule such a meeting, including authority to cancel, was left with the President and Secretary but with the understanding that a mail vote of the Executive Committee may be taken or an additional meeting of the Executive Committee be called if matters emerge for decision that are deemed by them to be of such character as to render such action necessary or desirable.

Professor Sharfman's tentative proposals with respect to the character of the program and its content were discussed and favorably received. Members of the Executive Committee are expected to communicate suggestions to Sharfman, both with respect to program topics and to appropriate personnel.

9. *Miscellaneous Items.*

a. *Committee on Consumption Economics.* It was voted to defer consideration of establishing a committee on consumption economics.

b. *Committee on Economists vis-à-vis the Public Service.* No action was taken on the subject of economists vis-à-vis the public service, but it was suggested that this matter could best be considered after receiving the forthcoming report of the Committee on Economists in the Public Service.

c. *Description of Field of Economics.* The problem of classification of fields of economics is under continuous study both in the office of the Editor and of the Secretary. Before a comprehensive revision of our directory is contemplated, it is desirable to reach an agreement on an improved revision of our classification. Any suggestions of improvement should be directed to J. W. Bell or Fritz Machlup.

Drafts of a description of the field of economics and of the profession of economist were presented by J. W. Bell, with the request that these drafts—themselves being the product of suggestions made to the office of the National Roster—be reviewed before being resubmitted to the director of the National Roster, George A. Works. This task was assigned to Frank W. Fetter, who was asked to consult with J. W. Bell, H. S. Ellis, F. Machlup, and others in performing this task. Whatever result materializes from this co-operative effort must not be construed as an official product of the Association.

d. *Directory of Names and Addresses.* No action was taken on the item of directory of names and addresses.

e. *Expenses of Representatives on Councils.* It was voted to authorize expenses of all members attending this meeting and to approve inviting and paying the expenses of one representative from each Council at the regular spring meeting of the Executive Committee.

f. *Additional Meetings of Executive Committee.* The President was left with power to call additional meetings of the Executive Committee.

10. *New Business.*

a. *Joint Committee on the Dewhurst Proposal.* It was voted to co-operate in the appointment of a joint committee of the A.E.A. and the A.S.A. to consider a proposal made by J. F. Dewhurst that a source book of economic statistics be prepared. This committee is to be an exploratory one, set up to examine the feasibility of the proposal. No financial commitments are involved.

b. *Financial Policy of the Association.* A proposal was made that a financial plan or long-run policy be prepared by the President and Secretary-Treasurer or by a special committee. Professor Bell reviewed the general financial policy pursued during the Association's more recent history. The President and Secretary were requested to draft a memorandum dealing with the matter.

c. *Mailing List.* Our policy with regard to the use of our mailing list was described by the President and the Secretary.

d. *Use of the Association's Name.* It was voted to refer to the Secretary and the Managing Editor the matter of ways and means to prevent the use of our Association's name for propaganda purposes. It was suggested that a statement of the purposes of the Association as found in Article III of the Charter might be copied as is or rephrased and printed in whatever places might be most appropriate to offset any misconstruction of the character and purposes of the American Economic Association.

Adjourned.

2. Minutes of the third meeting of the 1945 Executive Committee:

The third meeting of the 1945 Executive Committee was held at Hotel Cleveland, Cleveland, Ohio, Thursday, January 24, 1946. The meeting was called at 10:00 A.M. and was continued through the luncheon period and afternoon, and was resumed in the evening, adjourning at 10:00 P.M. The following were present: President Sharfman, presiding, Bell, Burns, Davis,

Groves, Homan, Schultz, Shoup, and Wolfe; and, by invitation, Copeland, Harris, Machlup, Schumpeter, Slichter, Spengler, Horace Taylor, and Wallace. Absent were: Edwards, Ellis, Fetter, Nourse, and Amos Taylor.

1. *Minutes of Meeting of April 19–20, 1945.* The minutes of the second meeting of the 1945 Executive Committee were approved as corrected. Corrections incorporated suggestions submitted by I. L. Sharfman and J. S. Davis.

2. *Introductory Remarks by President Sharfman.* President Sharfman, in his introductory remarks, explained events leading to the selection of the time and place for the present meetings and commented on the good fortune of our having printed a preliminary program for circulation among our membership, in view of the extreme tardiness of the December number of the *Review.* He expressed his particular appreciation to certain absent members, i.e., Edwards, Ellis, and Leland, for the significant work which they had done in helping out with the program. He described the arrangements made with those associations meeting concurrently, and in particular the three joint sessions scheduled with the American Finance Association.

3. *Reports on Publications.*

a. *American Economic Review (P. T. Homan).* Professor Homan apologized for the late appearance of the December number of the *Review* and explained that the delay was caused in part by events in the Editorial Office (death in Miss Connally's family, which forced her to take a ten-day leave) and in part by printers' delays (which extended a three-week tardiness to five weeks).

Professor Homan, looking forward to moving the Editorial Office back to Ithaca, promised a new era with regard to the prompt appearance of the *Review.* He plans to gear the schedule so that the March, June, and September numbers will be mailed not later than the fifteenth of these months, and the December number by the first of that month. It was pointed out that subscribers had no information of this year's meeting until after the event, since they did not receive copies of the separate announcement of the program mailed out with the ballot materials.

The budget for 1946 of $17,750, recommended by Professor Homan, was approved with the understanding that increased printing costs may call for a supplementary appropriation.

On recommendation of Professor Homan, the following appointments to the Editorial Board were voted by the Executive Committee: to succeed G. N. Halm, L. H. Seltzer; to succeed Mabel Newcomer, B. U. Ratchford.

b. *Papers and Proceedings (J. W. Bell).* The size of this volume can usually be predicted with a fair degree of accuracy, and this year's *Papers and Proceedings* can be held within the proportions of the volume for the last two years. However, the number of papers, especially those prepared for round table sessions, would substantially increase the size of this year's issue if everything were published. Professor Sharfman spoke in favor of a liberal editorial policy in publishing worthy contributions, even though it should substantially increase the bulk of the volume.

Professor Bell indicated his intention to complete the editorial job in time to mail the *Proceedings* as a supplement to the March number of the *Review.* However, rather than delay the latter's appearance, if ready on time, the *Proceedings* will be issued separately in April or May.

c. *Republications (H. S. Ellis).* In the absence of Professor Ellis, this report was read and ordered printed.

Professor Machlup reported results of our inquiry seeking permission from the Macmillan Company to republish three articles from the *Encyclopaedia of the Social Sciences* in Volume III of the Blakiston Series and suggested that we seek the advice of Mr. Anderson and other top officials with regard to ways and means of obtaining publication privileges without fees.

4. *Committee Reports.*

a. *Economists in the Public Service (M. A. Copeland).* Dr. Copeland summarized the report and presented the recommendations of the Committee. These recommendations raised certain questions of policy. Should they be submitted to the Civil Service Commission merely on behalf of the Committee, as requested in the report, or on behalf of the Association? Action finally taken consisted of receiving the report for publication in the *Proceedings* and ordering it transmitted to the Civil Service Commission without comment, not as recommendations of the American Economic Association, but of one of its committees. If hereafter the Executive Committee decides to endorse the report, it may do so. For the present it was suggested that President Sharfman draft an informal covering letter, making a strong statement of the importance of the report and expressing our interest and approval of the work of the Committee. The Committee was discharged with sincere thanks for a good job done.

A related topic, namely, economists vis-à-vis the public service, originally suggested by a letter from Miss Edna Lonigan, was tabled. Professor Davis expressed his judgment that there was a real problem involved, but it was decided not to take it up at this meeting.

b. *Honors and Awards (S. H. Slichter).* The report was read and received for publication in the *Proceedings* as an addition to the interim report of last year. Action was deferred until

the next annual meeting so that the views of the general membership might be made available before action is taken by the Executive Committee.

c. *Book Reviews* (*H. S. Ellis*). In the absence of Professor Ellis, this report was read, received, and ordered printed.

d. *Source Book of Economic Statistics* (*M. A. Copeland*). Dr. Copeland reported that this project is going forward with our co-operation.

e. *Review of Economics* (*J. J. Spengler*). After an extensive discussion of this report in which practically all present participated, it was voted to receive the report and have it published in the *Proceedings*. A proposal to publish the two volumes described in the report was approved in principle, with the understanding that a more specific prospectus would be prepared and made available at the spring meeting of the Executive Committee.

f. *Research* (*S. E. Leland*). In the absence of Professor Leland, D. H. Wallace presented the report which was received and ordered printed in the *Proceedings*. A proposal to submit a resolution concerning the participation of the social sciences in the National Science Foundation was deferred until the Sunday morning meeting of the new Executive Committee.

g. *Economic Opinion and Public Policy* (*C. D. Edwards*). In the absence of C. D. Edwards, Professor Davis presented the Committee report, which was received for publication in the *Proceedings*. Action was withheld until a review of the round table reports scheduled during the current meetings would enable members to form their judgment on policy questions. It is expected that action will be taken at the spring meeting of the Executive Committee.

h. *Teaching of Economics and Training of Economists* (*Horace Taylor*). Professor Taylor read a report, which was received and ordered printed in the *Proceedings*. The three recommendations of the Committee were considered separately, and the following action was taken: (1) Collaboration with the National Council for Social Studies, a department of the National Education Association, in the preparation of a study of education in the social studies in the schools, was approved, and the Committee was authorized to make arrangements and plans with representatives of the Council. (2) The preparation of the several subcommittee reports as a supplement to the *American Economic Review* was authorized. (3) Action was deferred on the request for additional appropriations, but it was suggested that the Committee prepare estimates of budget needs for presentation at the spring meeting of the Executive Committee.

5. *Reports of Council Representatives*. Brief reports were made of the activities of the A.C.L.S., S.S.R.C., and N.B.E.R. by Professors J. A. Schumpeter, J. J. Spengler (in the absence of E. G. Nourse), and D. H. Wallace. An account of the activities of these Councils and the National Bureau will appear in the *Proceedings*.

Resolutions were approved authorizing the Secretary to draft communications expressing our recognition and appreciation of the faithful and effective work of Robert T. Crane in his many years of service as Director of the Social Science Research Council; our congratulations to the National Bureau of Economic Research on the occasion of its twenty-fifth anniversary; and our recognition and appreciation of the services of Wesley C. Mitchell as Director of Research in the National Bureau.

6. Reports of the Treasurer and of the Finance Committee were presented by Professor Bell and ordered printed in the *Proceedings*.

7. Report on the Long-run Financial Policy of the Association was submitted by Professors Sharfman and Bell. This report was ordered printed in the *Proceedings*.

Actions arising out of the discussions of the above financial reports were as follows: the President and Secretary were authorized at their discretion to allow routine necessary expenses for committee work; the necessary out-of-pocket expenses of the President are hereafter to be paid by the Association; and the President was directed each year to submit a budget of his necessary expenses at the spring meeting of the Executive Committee. Also in this connection the Executive Committee approved authorization by the President and Secretary-Treasurer of traveling and questionnaire expenses for the Committee on Research during 1945.

Adjourned.

3. Minutes of the first meeting of the 1946 Executive Committee:

The first meeting of the 1946 Executive Committee was called to order by President E. A. Goldenweiser on Sunday, January 27, 1946, at 9:00 A.M. Others present were: Bell, Burns, Davis, Harris, Homan, Sharfman, Schultz, Wolfe, and, by invitation, Knight, Spengler, and Wallace. Absent were: Ellis, Fetter, Goodrich, Kuznets, and Wilcox.

The items on the agenda not covered at the previous Executive Committee meeting, as well as certain matters of unfinished business, were taken up at this time.

1. *Secretary's Report*. The report of the Secretary was summarized and was received for publication in the *Proceedings*.

2. *Committee on Research—Resolution*. The resolution prepared by the Committee on Research was presented by D. H. Wallace and, after full discussion, it was adopted in the following form:

Executive Committee of American Economic Association urges that any law establishing a National Science Foundation make adequate provision for the encouragement of research training and publication in the social sciences and provide also for adequate representation of social scientists in the formation of policies and the administration of the activities of the Foundation and that the right of freedom of inquiry and publication be fully safeguarded.

The Secretary was instructed to transmit copies to Senator Elbert E. Thomas, Chairman, and to his associates on the Military Affairs Committee.

3. *Honorary Members—Foreign.* This report had already been approved in April and ordered to be printed. The election of foreign honorary members was put on the agenda for the spring meeting of the Executive Committee. It was also suggested that an article on foreign honorary members be prepared for the *Review.*

4. *Annual Review of Economics.* Professor Spengler was requested to revise the report of his Committee in light of the discussion at the round table on the publication of an annual review of economics.

5. *New Business and Plans for 1946.* The meeting was adjourned without taking definite action on the time and place of the spring meeting of the Executive Committee, or the time and place or joint or separate character of the next annual meeting of the Association. These matters were left in the hands of the President and Secretary, who will communicate with members of the Committee before making important decisions.

Adjourned.

Activities and Operations

Annual Meetings. Our last national meeting was held in New York City, in December, 1941. The convention scheduled to be held in Cleveland in 1942 was canceled at the eleventh hour at the request of the ODT and a local or regional meeting was held in Washington in January in its stead.

A year later another regional meeting was held in Washington. Plans to follow this procedure February 1–4, 1945, were frustrated by the "Battle of the Bulge" in Belgium and its repercussions in this country. This was the first time since the formation of the Association when no regular meeting was held. Tentative plans for a program and for a national meeting in Washington or elsewhere on a restricted basis or of an all-out character were made last spring, but authority to cancel was left with the President and Secretary if a meeting should be in conflict with government policy with the understanding that a mail vote of the Executive Committee would be taken or a special meeting called if matters should emerge for decision which were deemed by them to be of such a character as to render such action necessary or desirable. By V-J Day it became apparent that some relaxation of restrictions would be forthcoming, and at a meeting of the President and Secretary in Ann Arbor on September 8 it was decided to reopen negotiations with the Cleveland Convention Bureau for a meeting to be held in Cleveland. The ban on conventions was definitely lifted within the next few days and notice was sent to members of the Executive Committee to the effect that the Association would meet in Cleveland, January 24 to 27, 1946. These dates were practically determined by the availability of transportation and hotel accommodations. It was realized that the convenience of our academic members would have to be sacrificed. No dates would fit the mixed schedules now prevailing in colleges and universities. Moreover, the limited accommodations would probably not be more than adequate for those who could attend "on company time." Next year conditions may be favorable enough to permit the revival of national meetings on the customary scale. Incidentally, the returns of the questionnaire sent out by President Sharfman on the time, place and

character of the annual meetings were very gratifying. The answers were, on the whole, suggestive and helpful, and many members expressed their appreciation for having been invited to make their desires known.

Membership. In last year's Report of the Secretary a chart was published showing the growth of the Association's membership and subscribers from the time of our foundation in 1885 to date. During the past year we have experienced another substantial increase in numbers—417. Our membership now totals 4,159 and 1,752 subscribers, the latter having in recent years increased even faster than the former. In last year's report are shown, also, graphs of the geographical distribution of our membership list and of the classification of members by fields of specialization. Some shifts have occurred during the current year, but the bulk of our members are still in the north-central and eastern sections of the country, and the labor, general economics, and finance groups still lead in the fields of specialization.

Publications. The activities of the Managing Editor of the *Review* and of the Board of Editors are reported by Professor Homan, who resumed his post in August after a year in London. During his absence, the affairs of the *Review* were capably managed by Professor Fritz Machlup, who deserves the thanks of the Association for his superb performance of this emergency job. The volume of *Papers and Proceedings* was separately issued in May, 1945, in order not to delay the appearance of the March number of the *Review*. The volume is somewhat fuller than usual since every effort was made to salvage all of the valuable contributions prepared for the canceled meetings. It consists of 407 pages of papers and discussions, 101 pages of proceedings (minutes of the meetings of the Executive Committee and reports of officers and committees), 12 pages of announcements of past publications, and 16 pages of a supplementary directory of new members. Reprints of the proceedings are distributed to officers of the Association and to members desiring copies.

The annual information booklet was re-edited and continues to be used in meeting general inquiries concerning the purposes and activities of the Association.

Photographs of past presidents J. S. Davis, F. A. Fetter, David Kinley, and John H. Gray appeared in the quarterly issues of the *Review* this year. The Secretary would appreciate receiving items of interest concerning deceased past presidents whose biographical sketches are published serially on the back of these photographs.

The list of "vacancies and applications" announced at the back of each number of the *Review* is beginning to expand somewhat. Members whose applications do not require immediate action are encouraged to use this service.

A.L.A.-A.E.A. Book List for European Libraries. A supply of copies of this report from the Secretary's Office has long since been exhausted and the many inquirers have been referred to the American Library Association for their printed list on economics and sociology. This list is a much abridged one, not classified according to subject-matter fields, but may serve a useful purpose.

Blakiston Volumes. A report of the activities of the Committee on Republications is submitted by Professor H. S. Ellis, Chairman of that Committee. Volume III, on the *Distribution of Income*, edited by B. F. Haley and W. J. Fellner, is about ready to go to press, and a fourth volume on international trade and finance is under way. The Committee welcomes suggestions for future volumes.

The Profession of Economist. The National Roster of Scientific and Specialized Personnel, now a division of the War Manpower Commission, has published and is widely circulating a descriptive circular on the profession of economist. It is a simplified and improved version of our earlier effort to describe what an economist is and what he does. Professors F. W. Fetter, H. S. Ellis, and Fritz Machlup are chiefly responsible for the improvements. It is not, however, to be construed as an official product of the Association. The Secretary has a few copies of this leaflet on hand, but it may be obtained directly by writing to the National Roster, Bureau of Placement, War Manpower Commission, in Washington.

Classification of Branches of Economics. The classification of fields of economics described in the circular above and the more elaborate classification of the National Roster's social science check list, which was worked out with our help, suggest improvements in our own classification which we use in connection with our *Directory* and books, articles, and Ph.D. dissertations in the *Review*. Another classification is being proposed for the special purposes of the annual *Review of Economics* by the Committee on Contemporary Development of Economic Thinking and Information. An all-purpose classification of economic fields generally recognized in the profession is perhaps too much to hope for, but any suggestions leading to an improvement of our classification will be a real contribution; and both the office of the Secretary and of the Editor would be grateful to anyone who will submit ideas on the classification of either personnel or literature.

Committee Activities. During the past few years the role of the Association's committees has assumed increasing importance. Activities on the part of certain committees have been particularly significant and in some instances their functioning marks a new departure in the operations of the Association. Brief comments are here made on the progress of committee work. Members interested are urged to read the reports of the committees in the *Proceedings;* namely, the Economist in the Public Service, M. A. Copeland, Chairman; Teaching of Economics and Training of Economists, Horace Taylor, Chairman; Economic Research, S. E. Leland, Chairman; Committee on Contemporary Development of Economic Thinking and Information, J. J. Spengler, Chairman; Joint Committee with the American Statistical Association on Source Book of Statistics, M. A. Copeland, Chairman; Economic Opinion and Public Policy, C. D. Edwards, Chairman; Book Reviews, H. S. Ellis, Chairman; Honors and Awards, S. H. Slichter, Chairman; Foreign Honorary Members, E. G. Nourse, Chairman. The comments following deal only with the first six of these.

Economists in the Public Service. The period of transition from peace to war raised the problem of classification and recruitment of economists in the

public service. Reconversion from war to peacetime also presents problems of interest to the public service and to colleges and universities. Essentially the problem is the same over the long period; namely, to establish programs of education in colleges and universities which will serve to prepare economists for the public service, and in the public service, to maintain and improve standards of professional competence.

The work of the Committee on Economists in the Public Service, M. A. Copeland, Chairman, started with the proposal by Mr. Copeland in the 1940 business meeting that our Association assume responsibility for certifying to the "competence of economists." The Executive Committee resolved in 1941 that in its opinion the American Economic Association, being an open Association, was not an appropriate organization to undertake such responsibility but that the officers of the Association were anxious to co-operate with public authorities in dealing with problems affecting the efficiency of federal civil service. The appointment of a committee was authorized in December, 1941, a preliminary report of the Committee was "considered" in 1942, and another report and the Committee continued with the request that attention be directed to the kinds of training in universities needed for the government service. In 1944 an interim report was read by J. S. Davis but was not ordered to be published. This report is now resubmitted in revised and final form and will be found in the *Proceedings*. It seems most likely that the role of economist in the public service will become of ever increasing importance in the years ahead. The interest which our Association has taken in this matter has stimulated numerous meetings with members of other groups in the social sciences, and its work is undoubtedly influencing the thinking of an ever broadening circle of persons concerned with the problem of the economist in the public service.

Teaching of Economics and the Training of Economists. Perhaps no one is or ever has been entirely satisfied with the way economics is taught, nor is the end product of our training all that we would like professional economists to be. These issues are particularly vital today on account of the sharply enlarged demand which wars and depressions have made on men with a knowledge of economic conditions, institutions, forces, and processes. This demand is particularly insistent on the part of government executives and administrators. Coupled with this demand has come the realization that our formal training has not always prepared the economist for the new place he has been called upon to fill. Mistakes and failures are no doubt due in some measure to the lack of depth and breadth of our curriculum and to shortcomings in our teaching method. In any case, with our entrance into the war came a ferment of revision, modification, and experimentation more intense even than during World War I. In 1942 our Association was asked by the U. S. Office of Education if we could supply any facts concerning wartime adjustments in the economic curricula of American colleges and universities. They wanted to know what is being taught and what ought to be taught during the war and the postwar period. A survey conducted from the Secretary's office, directed chiefly to the question of all-out defense and war courses versus the preservation of civil and cultural aspects, was pub-

lished in 1943 as Report Number 15—Economics, of a series on the "Adjustment of College Curriculum to Wartime Conditions and Needs" by the Federal Security Agency, U. S. Office of Education. During 1943 and 1944 the impact of discussions on educational problems in economics was felt to an increasing degree. The conduct of the elementary course in economics and the integration of economics and other social science subjects, economics in secondary schools, and the feasibility of our Association co-operating with other associations and foundations in promoting education in economics all called for attention. Under the circumstances it was thought desirable for our Association to set up a standing committee on teaching (April 7, 1944) to undertake a long-run program of study and to report from time to time on various phases of this complicated problem. In 1945 the more urgent problems were referred to a committee appointed "to study and report on possible improvements in undergraduate teaching of ecomics and the training of economists." This Committee, under the chairmanship of Professor Horace Taylor, has divided its work. Some ten subcommittees are engaged in finding out what is being done. Later we hope they will tell us what should be done. The composition of the committees and their procedure was reported in the *Proceedings*, 1945, pages 485–492. Since then many of you who have spent a long evening or two in answering the questionnaires sent out by some of the subcommittees will appreciate how thoroughly this procedure is being carried out.

It is significant, we think, that our Association should find it necessary to undertake and finance a project which in the past has been considered as more logically falling within the scope of educational institutions and foundations. Fortunately we have some funds to use for this worthy project ($1,000 has already been appropriated). If the project brings to light prospects of fruitful results when it has progressed beyond the exploratory stage, we might then be warranted in seeking outside financial aid.

Research. Not only has the improvement of teaching been of especial concern to the Association during the past year. We are likewise concerned with methods of stimulating research. Fostering research in economics has always been a purpose or objective of the Association, but definite proposals and specific ways and means for the organized promotion of economic research do not seem to have been initiated until about 1930, when efforts were made by the Social Science Research Council to initiate programs in its constituent societies. An Interim Committee on Research, appointed in October, 1931, submitted a report which was published in the *Proceedings* of March, 1932 (pages 295–296). It recommended the appointment of a standing committee on research, which proposal was put into the hands of another committee (*Proceedings*, March, 1933, pages 195–196). This committee, constituted of the Association's representatives on the S.S.R.C., was continued and after another year's work, submitted a final report which was published in March, 1935 (*Proceedings*, pages 215–225). In this report the recommendation was made to establish a standing committee on research "to act as the central agency of the American Economic Association in the promotion and facilitation of economic research broadly

defined in whatever manner the committee may deem advisable and to the extent of the committee's financial resources." An appropriation "not to exceed $200" was voted by the Executive Committee (page 201), whether for the expenses of the old committee or to start the new one is not clear.

Last year, on the motion of Professor Leland, our representative on the Social Science Research Council, a committee was appointed "to investigate the desirability of constituting a committee on research, define its terms of reference, and bring in a plan of organization and operation. . . ." On recommendation of this committee (Professors Groves and Shoup), a standing Committee on Research was appointed to co-operate with the Social Science Research Council and other research agencies and to improve economic research (*Proceedings*, May, 1945, pages 455–456).

The Committee on Research, of which S. E. Leland is Chairman, has proceeded in several directions to fulfill its functions.

1. It has sent out a questionnaire to members of the Association for the purpose of gathering material as a basis for a report on ways and means of improving research.

2. A project which might be called "preservation and use of wartime materials" is being carried on in co-operation with the Price Conference of the N.B.E.R. and with the Brookings Institution. The Committee is attempting to discover new and promising research projects and to investigate what materials in several war agencies are worth preserving for the use of economists. We have appropriated $1,500 for field work and other expenses involved in the work of the research committee.

Review of Economics. Another project closely related to research yet separate and in the hands of a different committee, of which J. J. Spengler is Chairman, contemplates the publication of periodical reports on recent developments in economic ideas and information. The purpose of this project is to serve in particular those of our members who, because of the interruptions of military or government service or because of the exacting demands made by accelerated programs or war exigencies, have been unable to follow the rapid changes of the times and the developments or contributions made in any but their own special fields. That probably includes most of us, not only with respect to related and more distant fields, but even in our own specialties.

This Committee has been engaged in canvassing the field to determine the scope and timing of the volume or volumes to be published, the editorial problems, and like matters which would give us most for the money we have to expend on the project. The sum of $5,000 has been appropriated for this purpose. If the exploratory results prove fruitful, it is hoped that funds from other sources may become available for the continuation of this undertaking.

Source Book of Economic Statistics. Still another proposal, involving the co-operative effort of our Association, the American Statistical Association, and possibly the Department of Commerce, is a project suggested by J. F. Dewhurst, involving the completion and publication of a comprehensive source book of economic statistics. A committee, M. A. Copeland, Chair-

ly. The Committee on the Function of Government reported to the

man, has been set up to examine the feasibility of this proposal. No financial commitments are involved.

Economic Opinion and Public Policy. The opinion of professional economists on public issues has not always been avidly sought. To be sure, government administrators and executive departments have sought the expert advice of individual economists on matters of monetary and banking reform, tariff and tax legislation, and so forth, but not until World War I, when the controversy of "taxing versus borrowing" became a lively public issue, had any attempt been made to get the opinion of professional economists as a group. The day of public polls had not yet arrived. Indeed, the status of "economist" had not yet become established in the public mind and hence the "profession" was not called upon to express itself nor did economists become articulate on their own initiative. Our Association is wisely precluded by its own charter provisions from taking any partisan view on public questions and thus hazarding the danger of becoming a pressure group.

Our members are largely scholars in academic life and represent a class not as a rule outspoken in matters affecting their own interest and only rarely prompted to action when principles and ideals dear to them are grossly offended. Occasionally outbursts of protest have taken place. For example, the Hawley-Smoot Tariff bill of 1930 provoked spontaneous protest of economists all over the country, as did the Administration's monetary policy in 1933.

The predominance of economic problems in the thirties, together with a growth of interest on the part of the public in what experts think on technical issues and the increasing popularity and significance of public polls, affords a background to Professor Graham's proposal in 1943 "to consider the possibilities of making the informed opinion of our membership more effective in matters of public policy." The Graham committee recommended that the Association designate from among its technically expert members *ad hoc* committees to study and report upon economic problems of public importance. Dr. C. O. Hardy's excellent analysis of the types of projects which might be set up to fulfill the indicated purpose of bringing the wisdom of economists to bear upon current public issues and of the distinctive features of the Graham proposal is found in the report of the Committee on Consensus Reports in the May, 1945, *Proceedings* (pages 502–508). Two chief questions needed to be answered. One, can attempts to secure consensus of scholarly opinion be successfully made? Two, if so, should the Association sponsor or help others to secure such consensus?

With respect to the first question concerning the feasibility of obtaining consensus, two types of experiments were undertaken. They were undertaken in connection with the annual program by *ad hoc* committees dealing respectively with agricultural price supports and the function of government in the postwar American economy. Reports of these committees may be found in the May, 1945, *Proceedings* (pages 222–247). The Committee on Agricultural Price Supports undertook to obtain a consensus by means of drafting a statement representing the area of agreement amongst the participants, areas of disagreement or exceptions being indicated incidental-

ly. The Committee on the Function of Government resorted to the questionnaire method, and a tabulation and analysis of the results of the poll. The work of the agricultural price support committee had been continued this year and two new committees have been established—one to report on the Webb-Pomerene Act and the other on monetary policy (see program for January 26–27, 1946).

Concerning the role of the Association with regard to economic opinion and public policy, a new subcommittee, C. D. Edwards, Chairman, was set up in April, 1945. This committee attempted to devise a program through which the Association "can help illuminate questions of public policy" through reports, statements, or polls within the Association or from other groups or individuals without committing the Association or its membership as a whole to any position on these questions. The report of this Committee on Focusing the Opinion of Members in Matters of Economic Policy was submitted to the Executive Committee for consideration and action January, 1946.

It is not clear at this moment where these efforts will eventually lead. The Executive Committee will probably not care to authorize setting up the machinery recommended by the Committee on Consensus unless the evidence is clear that fruitful results will materialize. The skeptical "impressions" of C. O. Hardy that "we do not need an inquiry to prove the extent of disagreement among reputable economists" may or may not be true. The results of our experiment so far are neither discouraging nor yet so favorable that we can call them an unqualified success. We may concede the existence of disagreement and still see a need for well-considered public statements, formulated by the collective effort of a group of experts, and find interesting and significant the results of a scientifically conducted poll of specialists whose research and study have made them particularly competent in the fields covered. If the Association does not undertake or aid others in performing the function, consensus reports and public polls will no doubt be carried on by others less able and qualified to perform the job, and we will still run the risk of having the name of the Association involved as long as our members participate either directly or indirectly.

It was in connection with the discussion of the Association's function as a sponsor or passive agent that prompted the Executive Committee to resolve at its last meeting that ways and means be found to prevent the use of the Association's name for propaganda purposes, and it was suggested that the statement of the purposes of the Association found in Article III of our Charter and Bylaws be rephrased and printed wherever misconstruction of the purposes and character of our Association seems possible.

Committees Appointed During the Year.

Committee on Book Reviews
Howard S. Ellis, Chairman
Eveline M. Burns
Frank W. Fetter

Finance Committee
Roy C. Osgood, Chairman
Charles C. Wells
James Washington Bell

Nominating Committee
J. Douglas Brown, Chairman
Milton Gilbert
Bernard F. Haley
Ben W. Lewis
Mabel Newcomer
George W. Stocking

Subcommittee on Honorary Members—Foreign
Edwin G. Nourse, Chairman
Albert B. Wolfe
Joseph S. Davis

Subcommittee on Consensus Reports
Corwin D. Edwards, Chairman
Theodore W. Schultz
Eveline M. Burns
Joseph S. Davis
James Washington Bell

Subcommittee on Contemporary Development of Economic Thinking and Information
Joseph J. Spengler, Chairman
Corwin D. Edwards
Aryness Joy Wickens
W. Blair Stewart
Eveline M. Burns

Joint Committee with American Statistical Association to Explore Merits and Feasibility of Source Book of Economic Statistics
Morris A. Copeland, A.E.A. Chairman
Stacy May
Amos E. Taylor

Ad Hoc Committee on the Webb-Pomerene Act
Edward S. Mason, Chairman
Theodore J. Kreps
Arthur R. Burns
Mordecai Ezekiel
Myron W. Watkins
Fritz Machlup
Morris S. Rosenthal

Ad Hoc Committee on Monetary Policy
James Washington Bell, Chairman
Benjamin H. Beckhart
Frederick A. Bradford
Howard S. Ellis
Seymour E. Harris
Leonard L. Watkins
Ray B. Westerfield

Exploratory Committee on Research
Harold M. Groves, Chairman
Carl S. Shoup

Committee on Research
Simeon E. Leland, Chairman
Joseph J. Spengler
Donald H. Wallace
Edwin G. Nourse

Committee on Local Arrangements
Daniel A. Hill, Chairman
Russell Weisman

Committee on Elections
John K. Langum, Chairman
Henry B. Arthur
James Washington Bell, *Ex Officio*

Representatives of the Association on various occasions.

Inauguration of George Henry Armacost as President of the University of Redlands
Gordon S. Watkins

Inauguration of Ralph Cooper Hutchison as President of Lafayette College
Josiah T. Phinney

Mitchell Field Conference on the Integration of the Veteran with the Community
William Haber

Inauguration of Franklin Stewart Harris as President of Utah State Agricultural College
Evan B. Murray
Inauguration of Howard S. McDonald as President of Brigham Young University
A. Smith Pond
Inauguration of Laurence McKinley Gould as President of St. Olaf College
Sever Klaragard
Carnegie Endowment for International Peace Conference
Amos E. Taylor
Howard S. Ellis
Inauguration of Byron Sharpe Hollinshead as President of Coe College
C. Ward Macy
Inauguration of Wilson Martindale Compton as President of the State College of Washington
Edwin F. Dummeier

Mailing List. The use of the mailing list was granted to the following:
Committee for Economic Development
To send *Bretton Woods Proposals, Postwar Employment and the Removal of Wartime Controls*, and *International Trade, Foreign Investment and Domestic Employment*, and card announcing radio weekly series called "Jobs After Victory"
Economists' Committee on the Bretton Woods Program
To send questionnaire
Treasury Department
To send extract from the Report of the Secretary of the Treasury to Congress, "Fiscal and Monetary Policy"
Professor Irving Fisher
To send letter on 100 per cent money and a follow-up letter
Federal Reserve System
Twentieth Century Fund
To announce, *Financing Post-War Prosperity*
Philip Cortney
To send reprint from *Commercial and Financial Chronicle*, "Full Employment—Wages and Democracy"
Roy G. Blakey and Arthur R. Upgren
To send *Job Credit Tax Plan*
Review of Economic Statistics
To send advertisement of this publication
American Labor Conference on International Affairs
To send advertisement of October, 1945, and January, 1946, issues on "Planning and Paying for Full Employment"
Harvard University Press
To send letters featuring two current economics books

University of California Press
To send circulars describing the publications of the Bureau of Business and Economic Research

It is with regret that the names of the following persons have been removed from our active membership list, notice of their deaths having been received during the year:

C. F. Bastable (Honorary Member)
Gustav Cassel (Honorary Member)
John R. Commons
Walter W. Cooper
David Davidson (Honorary Member)
Frank H. Dixon
Frederick J. Ellerman
Lawrence Flinn
David Friday
Elsie Glück
Hiram J. Halle
Felix E. Held
John W. Jenkins
John E. Kirshman
Walter C. Liebner
Oliver J. Marston
John F. Normano
Bernhard Ostrolenk
William A. Scott
Percy S. Straus
Sarah S. W. Walden
George S. Wehrwein
Horace G. White
Harry J. Winslow
Edith E. Wood

Respectfully submitted,
JAMES WASHINGTON BELL, *Secretary*

EXHIBIT I
PUBLICATION COSTS

	PROCEEDINGS			HANDBOOKS		
Year*	Number of Pages	Number of Copies	Cost	Number of Pages	Number of Copies	Cost
1930	222	4,300	$1,353.91			
1931	308	4,300	1,919.18	88	4,200	$ 589.54
1932	316	4,200	1,819.75			
1933	216	4,000	1,284.85	88	3,900	522.71
1934	232	3,700	1,192.91			
1935	248	4,000	1,347.88			
1936	360	4,200	2,037.90	58	4,100	454.36
1937	344	4,300	1,922.03			
1938	200	4,500	1,234.10	112	4,500	1,118.84†
1939	288	4,600	1,785.91			
1940	444	4,900	2,658.12	108	5,000	822.58
1941	479	5,200	3,294.45			
1942	548	5,400	3,909.79	208	5,500	1,775.72†
1943	535	5,500	3,652.56			
1944	470	5,800	3,350.40			
	144	5,900	1,215.22‡			
1945	536	6,400	4,502.84			

* This is the year of publication and pertains to the meeting of the preceding year. The figures are published in the subsequent year.
† "Who's who" volumes.
‡ Part of papers presented at annual meeting published as supplement to June number.

EXHIBIT II

MEMBERS AND SUBSCRIBERS

	Total 12/11/44	Added	Re-moved	Gain or *Loss*	Total 12/11/45
Annual members	3,785	380*	194†	186	3,971
Junior members	59	40‡	35**	5	64
Family members	49	11	4	7	56
Complimentary members	20		3	*3*	17††
Life members	32	4	5	*1*	31
Honorary members	16	2	3	*1*	15
Subtotals	3,961	437	244	193	4,154
Subscribers	1,533	412	193	219	1,752
Totals	5,494	849	437	412	5,906

* Includes 20 junior members changed to annual.

† Resigned, 45; nonpayment of dues, 91; died, 21; lack of address, 30; changed to junior members, 7.

‡ Includes 7 annual members changed to junior.

** Includes 20 junior members changed to annual.

†† Includes 8 complimentary members who do not receive the publications of the Association.

REPORT OF THE TREASURER OF THE ASSOCIATION FOR THE YEAR ENDING DECEMBER 11, 1945

This has been a very active year for the Association, as the description in the Secretary's Report indicates. Obviously, our expanded committee operations and enlarged publications would not have been possible without adequate financial support. Fortunately, we had a year of wholesome growth and have also had a comfortable reserve on which to work.

Members are referred to the balance sheet and statement of income and expenses in the Auditor's Report for a detailed picture of the financial condition of the Association and the operating results for the current fiscal year. The accompanying summary of comparable results this year and last shows the chief sources of our income, how the money was expended, and how much was left unexpended and put to surplus or how much was drawn down from the reserve.

COMPARATIVE RESULTS OF OPERATIONS FOR 1944 AND 1945

Income	1944	1945	Increase or *Decrease*
Membership dues	$19,242	$20,260	$ 1,018
Interest and dividends	3,299	3,862	563
Profit on sales of securities	2,019	2,162	143
Publications income (subscriptions, sales of copies, advertising)	10,647	11,164	517
Total income	$35,207	$37,448	$ 2,241
Expenses			
Administration and operating	$ 9,114	$ 9,642	$ 528
Publications (*Review*, *Papers and Proceedings*)	19,959	22,890	2,931
Appropriations for special committees		7,500	7,500
Total expenses	$29,073	$40,032	$10,959
Net income or *deficit*	$ 6,134	*$ 2,584*	*$ 8,718*

In this table, we compare income from all sources with total expenses, both administrative and publications. This gives a better picture than the Auditor's Report which, in order to determine net publication costs, shows publication income as a deduction from publication expense. A continued expansion in both memberships and subscriptions accounts for the larger part of our increased income. Interest and dividends on our investments also increased somewhat, and the nonrecurring item, profit on sales of securities, produced a substantial income again this year. Administrative and operating expenses mounted but were held within reasonable bounds considering the heavier load resulting from our growth and our broadening activities. A substantial increase in publication expense was largely due to the size of the *Review* and the number of copies printed. The edition of our publications now runs to 6,600. These costs are partly estimated, since the bill for the December number is not received until after the Auditor's Report and the figure for 1944 proved to be unduly low, as was pointed out in

last year's Treasurer's Report, so that the increased cost of the *Review* this year over last should be shaded by some $800 or $900. The net operating income for the year would have stood at $4,916 (income of $37,448 minus expenses of $32,532) but for the new item, appropriations for special committees, which amounted to $7,500. Although only $723.50 of this appropriation had been spent by the end of the fiscal year, the balance is, according to sound accounting practice, considered a contingent liability, drawing down our accumulated surplus and leaving the year's operations showing a deficit of $2,584.

There is no need here to recapitulate the financial history of the Association, nor to analyze the strength of our present financial condition. Members are referred to last year's Report of the Treasurer (May, 1945, *Proceedings*, pages 472–477), especially the figures showing surplus and net annual income or deficit, 1909–45, and security holdings, 1920–44, and returns on investments, 1925–44. The unappropriated surplus or net balance of income over expenditures after accounting for all other liabilities and special funds stood at $68,348 at the beginning of the fiscal period and at $66,014 on December 11, 1945. (See Auditor's Report, Exhibit I.) Our policy with respect to the use of this financial backlog was made the subject of a report on long-run financial policy by the President and Secretary which is found elsewhere in the *Proceedings*.

The tables following are the usual ones, showing the investment portfolio and the return on investments. The figures used to bring the tables up to date are taken from the Finance Committee Report for costs and market prices of stocks and bonds as of November 21, 1945, and the income from the Auditor's Report of December 11, 1945. The rate of return is roughly determined by dividing the cost of our holdings by the interest and dividends received. This figure shows a yield of 4.71 per cent and on market price an income of only 3.72 per cent. The prospects are that this return will continue to decline.

Members interested in the composition of our portfolio should turn to the Report of the Finance Committee.

To Roy C. Osgood and Charles C. Wells we express our appreciation for their continued conscientious and effective service in managing this fund.

Respectfully submitted,
JAMES WASHINGTON BELL, *Treasurer*

Investment Portfolio

Year	At Par	Cost			Market
	Bonds	Bonds	Stocks	Total	Stocks and Bonds
1925	$25,000	$24,601.75		$24,661.75	
1926	27,000	26,623.25		26,623.25	
1927	29,000	26,688.45		28,688.45	
1928	29,000	28,633.45		28,633.45	
1929	31,000	30,569.48		30,569.48	
1930	31,000	32,439.48		32,439.48	$32,635.40
1931	39,500	39,134.48		39,134.48	32,307.44
1932	40,500	41,134.48		41,134.48	33,239.70
1933	33,500	32,962.48	$ 3,954.23	36,916.71	31,522.50
1934	31,500	30,989.48	3,954.23	34,943.71	34,714.00
1935	16,000	15,280.48	28,114.50	43,394.98	50,338.72
1936	17,000	16,260.13	33,712.57	49,972.70	62,991.00
1937	20,000	19,160.91	37,399.20	56,560.11	52,064.75
1938	22,000	20,180.95	38,302.20	58,483.15	58,598.88
1939	22,000	20,039.57	41,155.95	61,195.52	61,529.38
1940	25,000	22,519.80	41,155.95	63,675.75	60,553.88
1941	25,000	22,439.81	51,155.95	63,595.76	58,606.11
1942	27,000	24,651.12	41,556.06	66,207.18	58,211.88
1943	28,000	23,822.54	40,071.31	63,893.85	66,012.12
1944	30,000	25,731.51	46,033.81	71,765.32	81,844.01
1945	40,000	36,705.95	44,955.81	81,661.76	103,574.76

Return on Investments

Year	Bonds	Stocks	Total	Rate of Return on Cost
1925	$1,350.00		$1,350.00*	
1926	1,410.00		1,410.00*	
1927	1,524.70		1,524.70†	
1928	1,642.77		1,642.77†	
1929	1,575.44		1,575.44†	
1930	1,695.21		1,695.21	5.22%
1931	1,886.81		1,886.81	4.82
1932	2,014.36		2,014.36	4.89
1933	1,679.49	$ 108.57	1,789.06	4.84
1934	1,593.13	218.07	1,811.20	5.18
1935	1,022.96	680.70	1,703.66	3.92
1936	801.77	1,597.63	2,399.40	5.00
1937	884.87	2,689.62	3,574.49	6.31
1938	928.04	2,063.02	2,991.06	5.11
1939	978.79	1,781.52	2,760.31	4.51
1940	1,037.56	2,182.46	3,220.02	5.06
1941	1,088.97	2,497.35	3,586.32	5.64
1942	1,306.49	2,186.17	3,492.66	5.28
1943	1,133.97	2,094.47	3,228.44	4.90
1944	992.67	2,410.57	3,403.24	4.60
1945	1,479.99	2,488.85	3,968.84	4.71

* Estimated income for year.
† Certificate of deposit interest included.

REPORT OF THE FINANCE COMMITTEE

November 23, 1945

Executive Committee,
American Economic Association,
Evanston, Illinois.

GENTLEMEN:

Herewith are reports of the bond, preferred stock, and common stock holdings of the American Economic Association as of the close of business November 21, 1945. These reports include cost of securities together with the value of those held on December 11, 1943, and November 28, 1944. The total cost of our present holdings together with the market value as of November 21, 1945, as well as the market value of securities held on December 11, 1943, and November 28, 1944, is as follows:

	Cost of Holdings Held on 11/21/45	*Market Value or Last Sale 12/11/43*	*11/28/44*	*11/21/45*
Bonds	$36,705.95	$26,272.75	$36,778.75	$40,241.25
Stock	44,955.81	40,891.37	52,790.26	63,333.51
Total	$81,661.76	$67,164.12	$89,569.01	$103,574.76

During the past fiscal year the following securities were sold or presented for payment when called:

$2,000	Shawinigan Water and Power Co., 4½%, 1967
2,000	Pennsylvania R.R. Co., 4½% Debs., 1970
1,000	Erie Railroad Co., 4% 1st Cons. Mtge., 1995
2,000	St. Louis and Iron Mountain Southern Ry., 4%, 1933
2,000	Central Illinois Electric and Gas Co., 3¾%, 1964
4,000	Chicago, Milwaukee and St. Paul R.R., 4%, 1989
3,000	Chicago, Terre Haute and Southeastern R.R., 5%, 1960
25 Shares	Champion Paper and Fibre, 6% Cum. Pfd.
10 Shares	Household Finance Corp., 5% Pfd.

In this year we added to our holdings:

25 Shares	Crane and Co., 3¾%, Pfd.
$8,000	U. S. Treasury, 2½%, 1967–72
1,000	Pere Marquette, 3⅜%, 1980
1,000	Reading Co., 1st and Ref. Ser. D, 3⅛%, 1995
3,000	Chicago and Northwestern Ry., 4½%, 1999
5,000	New York Central, 4½%, 2013
2,000	Central New England Ry., 1st Mtge., 4%, 1961
2,000	Southern Pacific Co., 4½%, 1969

Listed below are the bonds, preferred stock, and common stock holdings of the Association, showing cost and market values as of December 11, 1943, November 28, 1944, and November 21, 1945.

BONDS

Amount	*Issue*	*Int.*	*Due*	*Cost*	*Value Market or Last Sale 12/11/43*	*11/28/44*	*11/21/45*
$5,000	Central New England Ry., 1st Mtge.	4	1961	$4,755.00			$5,087.50
3,000	Chicago and Northwestern Ry., 2nd Mtge.	4½	1999	2,431.50			2,730.00
2,000	Grand Trunk Western Railway Co., 1st Mtge., 50-year	4	1950	1,855.45	$2,035.00	$2,100.00	2,145.00

3,000 Illinois Central R.R., St. Louis Div.	3	1951	$2,212.50		$1,770.00	$3,056.25
5,000 New York Central R.R., Ref. and Imp.	4½	2013	4,172.50			4,562.50
1,000 Pennsylvania Railroad Co., Gen. Mtge., Series D	4¼	1981	986.50	$1,061.25	1,180.00	1,267.50
1,000 Pere Marquette Ry. Co., 1st Mtge.	3⅜	1980	1,000.00			1,026.25
1,000 Reading Co., 1st and Ref., Ser. D	3⅛	1995	1,010.00			998.75
5,000 Southern Pacific Co.	4½	1969	4,282.50			5,175.00
3,000 U. S. Defense Bonds, Series G	2½	1954	3,000.00	3,000.00	3,000.00	3,000.00
3,000 U. S. Government	2	1953–51	3,000.00	3,000.00	3,000.00	3,112.50
8,000 U. S. Treasury Bonds	2½	1967–72	8,000.00			8,080.00

Stocks

		Value		
		Market or Last Sale		
Number of Shares of Preferred Stock	*Cost*	*12/11/43*	*11/28/44*	*11/21/45*
25 Crane Co., 3¾% Cum. Pfd.	$2,550.00			$2,675.00
14 Glidden Co.	735.00	$ 644.00	$ 707.00	787.50
25 International Harvester Co.	3,686.63	4,226.00	4,500.00	4,637.50
Number of Shares of Common Stock				
25 Chesapeake and Ohio Railway Co.	1,309.07	1,156.25	1,215.63	1,415.63
55 Commonwealth Edison Co.	1,525.51	1,326.87	1,588.13	1,842.50
20 Erie Railroad Co.	279.13	195.00	240.00	357.50
50 General American Transportation Corp.	3,084.30	2,037.50	2,600.00	2,981.25
100 General Electric Co.	2,738.19	3,737.50	3,937.50	4,687.50
50 General Motors Corp.	2,057.47	2,512.50	3,075.00	3,612.50
58 Glidden Co.	1,635.72	1,073.00	1,392.00	2,146.00
50 Houston Lighting and Power	3,237.50		3,450.00	4,250.00
50 Kroger Grocery and Baking Co.	1,297.22	1,593.75	1,850.00	2,362.50
25 Liggett and Myers Co., B	2,018.13	1,600.00	1,937.50	2,478.13
50 Link-Belt Co.	2,524.15	1,800.00	1,950.00	2,868.75
50 Mesta Machine Co.	2,007.37	1,375.00	1,750.00	2,450.00
50 J. C. Penney Co.	2,878.28	4,825.00	5,562.50	6,950.00
50 Procter and Gamble Co.	2,459.72	2,818.75	2,825.00	3,200.00
50 Standard Brands, Inc.	852.62	1,512.50	1,425.00	2,125.00
50 Standard Oil Co. of California	2,097.27	1,806.25	1,793.75	2,306.25
50 Union Carbide and Carbon Corp.	2,867.88	3,200.00	3,956.25	4,950.00
100 Wayne Pump Co.	3,114.65	2,350.00	3,075.00	4,250.00

Since making the above listing, the following changes have been recommended:

Sell

20 Shares	Erie Railroad Common
25 Shares	J. C. Penney Co. Common
50 Shares	Mesta Machine Co. Common
50 Shares	Standard Oil of California Common
$2,000	New York Central Ref. and Imp., 4½%, 2013
5,000	Southern Pacific Co., 4½%, 1969

With the proceeds from Mesta buy Kroger Grocery and shift from Standard Oil in to Gulf Oil. With the balance of the proceeds from Erie, Penney, and the rail bonds, buy U. S. Treasury 2½%, 1969–72.

Respectfully submitted,
Roy C. Osgood, *Chairman*
Charles C. Wells
James Washington Bell

REPORT OF THE PRESIDENT AND SECRETARY ON LONG-RUN FINANCIAL POLICY OF THE ASSOCIATION

At the spring meeting of the Executive Committee, held at Princeton, New Jersey, April 19–20, 1945, the President and the Secretary were requested to draft a memorandum dealing with the problem of long-run financial policy of the Association. This request grew out of the discussion of proposals involving financial commitments of substantial amount, to implement the work of the Committee on the Teaching of Economics and the Training of Economists, and to underwrite the project for the publication of an annual review of economics entrusted to the newly created Committee on Contemporary Development of Economic Thinking and Information. Since other worth-while projects will doubtless be proposed from time to time, it was thought that the Executive Committee would be aided in making its decisions by having before it, for discussion, some statement of general financial policy.

The financial condition of the Association is at present wholesome and reasonably strong. Perhaps the best measure of its financial position is to be found in the unappropriated surplus. For the fiscal year ending December 11, 1945, this figure stood at $66,014.51—an amount which had been accumulated through gradual accretions since 1920. As stated in last year's Treasurer's Report, "this represents a substantial financial backlog to tide us over future exigencies."

During the year 1945 the usual administrative and publishing activities of our Association have continued, with no very marked change in our financial condition as a result of these activities. We have, however, made certain special commitments which will reduce the accumulated surplus. As of the present time, these commitments aggregate $7,500: $1,000 for the Committee on the Teaching of Economics and the Training of Economists (Horace Taylor, Chairman); $5,000 for the Committee on Contemporary Development of Economic Thinking and Information (Joseph J. Spengler, Chairman); and $1,500 for the Committee on Research (Simeon E. Leland, Chairman), which was approved by mail ballot of the Executive Committee in November, 1945.

Although the Association has twice during the past generation had to pass the hat to remain solvent, it is not likely that we will soon again have to depend upon the generosity of loyal friends to meet deficits, unless our activities are substantially expanded without adequate consideration of the financial consequences. Aside from the special financial commitments recently made, expenditures have been confined to the publication of the *American Economic Review*, including occasional supplements, the *Papers and Proceedings*, and the *Directories*, and to the financing of the Office of the Secretary, the meetings of the Executive Committee, and the annual meeting of the Association. Occasionally relatively minor incidental expenses have been provided for committees other than the Executive Committee. In 1937 and 1938 the sum of $1,833 was subscribed, as a contribution to scholarship, to the Henry Higgs Bibliographical Research Project.

These activities can, of course, be readily expanded. It is important, however, that we do not overstep the bounds of our financial capacity. Until 1920 the officers of the Association apparently deemed it sufficient to proceed on a hand-to-mouth basis. When this policy resulted in recurring difficulties, because of mistaken estimates of both revenues and expenses, the maintenance of a reasonable reserve came to constitute an integral part of our financial policy; and this reserve has somewhat fortuitiously been enlarged to its present proportions. If most of our unappropriated surplus were to be turned into an endowment fund, the income from which could be used to supplement membership dues, reasonably wide variations of expenditures would be rendered possible, and outlays could be planned over long as well as short periods and in substantial amounts. This approach appears to be as extreme, on the side of conservatism, as was the earlier policy, on the side of imprudence. Since the American Economic Association has had a vigorous and wholesome development in a field which promises to remain vital and important, we think it desirable that a middle course be pursued: that we maintain at all times a reasonable reserve, in the interest of financial health and stability, and that we also expand our activities, from past accumulations as well as from current income, in such directions as may from time to time be deemed to enhance our usefulness. Our present unappropriated surplus appears to be adequate for both these purposes.

It does not seem wise or feasible, however, to translate these general objectives into concrete terms. While continuity of policy is highly desirable, it is doubtful whether any group of officers for the time being should attempt to prejudge the course of development and to bind their successors. What constitutes a reasonable reserve may well be a changing fraction of our unappropriated surplus, and what activities may appropriately be undertaken, despite their cost, should be judged by the merits of the proposals submitted for consideration. We have already initiated a number of projects which may require added outlays of considerable size. If the extensive investigation now in process concerning the teaching of economics and the training of economists should be carried through to full fruition, very substantial financial needs may well be encountered. Similarly, there can be no assurance that the publication of an annual review of economics may not involve some measure of financial underwriting by the Association for a number of years. The labors of the Committee dealing with so-called "consensus reports" may lead to the establishment of a series of publications on matters of public policy, with a like need of financial support, at least in the early stages. Finally, our present intensive exploration of research possibilities may require financial commitments in addition to those already made. These activities, together with such other projects as may approve themselves to the Executive Committee from time to time, are likely to direct the work of the Association into fruitful channels and at the same time be kept within its financial capacity. This piecemeal approach appears to be preferable to any general long-run financial planning.

One concrete suggestion does seem to be justified. In view of our favorable financial position, the Association ought to provide more readily and more

liberally for the necessary expenses of its various committees. There is no justification for expecting members who devote themselves to the service of the Association to do so without reimbursement of reasonable out-of-pocket expenses required by this service. The problem has arisen in connection with a number of committees now operating. It is likely to arise even more frequently in the future. Since the committee work of the Association is in process of expansion, such provision of expense funds appears to be urgent. It would also add to the effectiveness of the Association's work if a fund for clerical and stenographic assistance as well as for necessary travel were expressly provided for the President at the beginning of each term. Under existing circumstances undue reliance is placed upon the accidental availability of necessary facilities. Many incumbents of the office of president are either seriously hampered in their work or must incur personal financial sacrifices which should not be imposed upon them.

I. L. SHARFMAN, *President*
J. W. BELL, *Secretary*

REPORT OF THE AUDITOR

January 4, 1946

Executive Committee,
American Economic Association,
Evanston, Illinois.

Dear Sirs:

In accordance with instructions we have examined the accounts and related records of the American Economic Association for the fiscal year ended December 11, 1945, and now submit our report thereon together with the following exhibits:

Balance Sheet—December 11, 1945	Exhibit 1
Statement of Income and Expenses for the Fiscal Year Ended December 11, 1945	Exhibit 2

Results from Operations

Net loss for the fiscal year ended December 11, 1945, was $2,584 compared with net income of $6,134 for the preceding fiscal period as shown in the following summary. In the current year $7,500 was appropriated for special committees; there was no corresponding item in the preceding year.

Particulars	Year Ended Dec. 11, 1944	Year Ended Dec. 11, 1945	Increase *Decrease*
Income:			
Dues	$19,242	$20,260	$1,018
Interest and dividends	3,299	3,862	563
Profit on sales of securities	2,019	2,162	143
Total income	$24,560	$26,284	$1,724
Expenses:			
Administrative and other operating expenses	$ 9,114	$ 9,642	$ 528
Publication expenses	19,959	22,890	2,931
Publication income	*10,647*	*11,164*	*517*
Total expenses	$18,426	$21,368	$2,942
Net operating income	$ 6,134	$ 4,916	$*1,218*
Appropriations for special committees	—	7,500	7,500
Net income or *loss*	$ 6,134	$ *2,584*	$*8,718*

The increase in dues reflects the increase in membership during the period under review. Membership at December 11, 1944, and at December 11, 1945, as reported by the Secretary was as follows:

Classification	Number of Members Dec. 11, 1944	Number of Members Dec. 11, 1945
Members:		
Regular	3,785	3,971
Junior	59	64
Family	49	56
Life	32	31
Honorary	16	15
Complimentary	20	17
Totals	3,961	4,154

Interest on bonds owned was accounted for in accordance with stated rates; dividends received on stocks were compared with amounts reported in published records of dividends paid. Computation of the $2,162 gain on securities sold is shown below:

	Cost	Sales Price	Gain
Bonds	$ 9,555	$11,474	$1,919
Stocks	3,628	3,871	243
Totals	$13,183	$15,345	$2,162

Net publication expense, as shown in the following summary, amounted to $11,726 for the current period as compared with $9,312 for the preceding period:

Particulars	Year Ended Dec. 11, 1944	Year Ended Dec. 11, 1945	Budgetary Estimates for 1945
Expenses:			
Printing of—			
Review	$ 7,773	$10,588	$8,500
Proceedings	4,566	4,503	—
Editor's honorarium	2,500	2,500	2,500
Payments to contributors	1,582	1,668	1,600
Editorial clerical salaries	3,195	3,300	3,300
Editorial supplies and expenses	261	280	250
Sundry publication expenses	82	51	
Total expenses	$19,959	$22,890	
Less—Income:			
Subscriptions, other than members	$ 7,330	$ 8,456	
Sales of copies	1,529	1,056	
Advertising	1,788	1,652	
Total income	$10,647	$11,164	
Net publication expense	$ 9,312	$11,726	

The December, 1945, issue of the *Review* had not been printed at the time of our examination. The $2,900 estimated expense of printing 6,600 copies (and reprints) is included in the costs above. This estimate was based on the average cost per page of copy for the preceding issues during the year.

The $7,500 appropriated during the year for special committees and the unexpended balance ($6,776.50) per Exhibit 1 are analyzed by committees as follows:

	Appropriated	Expenses During The Year	Unexpended Balance
Committee on Contemporary Development of Economic Thinking and Information	$5,000.00		$5,000.00
Committee on Research	1,500.00	$ 323.50	1,176.50
Committee on Undergraduate Teaching of Economics and Training of Economists	1,000.00	400.00	600.00
Totals	$7,500.00	$723.50	$6,776.50

Financial Condition

Condensed balance sheets of the Association at December 11, 1944, and 1945 are compared below:

	Dec. 11, 1944	Dec. 11, 1945	Increase *Decrease*
Assets			
Cash on deposit and on hand	$14,462	$ 4,510	$ *9,952*
Receivables, net	1,249	1,201	*48*
Inventories	228	345	117
Furniture and fixtures (net)	518	437	*81*
Investments at cost—			
Bonds	25,732	36,706	10,974
Stocks	46,034	44,956	*1,078*
	$88,223	$88,155	$ *68*
Liabilities			
Accounts payable	$ 2,500	$ 3,904	$ 1,404
Allied Social Science Associations	829	829	—
Income tax withheld from employees	77	121	44
Deferred income	11,578	5,166	*6,412*
Membership extension fund	1,655	1,558	*97*
Fund for proposed secretariat	35	35	—
Committee funds appropriated (not expended)	—	6,777	6,777
Life memberships	3,200	3,750	550
Surplus—			
Balance at beginning of period	62,190	68,349	6,159
Net income or *loss* for period	6,134	*2,584*	*8,718*
Transfers from life memberships	25	250	225
	$88,223	$88,155	$ *68*

Cash on deposit was satisfactorily reconciled with balances confirmed directly to us by the depositories.

The receivables of the Association were not confirmed by correspondence with the debtors. Based upon the Association's past experience, the reserve for doubtful accounts appears to be adequate to cover losses.

Changes in the investment accounts were vouched by examination of broker's invoices and other supporting data. Securities held were confirmed directly to us by the State Bank and Trust Company of Evanston, Illinois, custodian for the Association.

Insofar as we were able to ascertain, all liabilities of the Association at December 11, 1945, are reflected in the accompanying balance sheet and the Secretary has represented to us that to the best of his knowledge all liabilities are disclosed.

We wish to take this opportunity to express our appreciation of the courtesies and co-operation extended to our representatives during the course of the examination.

Very truly yours

DAVID HIMMELBLAU & CO.
Certified Public Accountants

EXHIBIT I

American Economic Association
Balance Sheet—December 11, 1945

Assets

Current Assets:			
Cash on deposit and on hand—			
State Bank and Trust Company, Evanston		$ 1,331.65	
National Bank of Commerce of Chicago		3,150.82	
Petty cash		27.40	$ 4,509.87
Receivables—			
Interest accrued on bonds		$ 507.32	
Review Advertising		400.63	
Membership dues		212.25	
Publication sales		183.15	
Sundry		14.25	
Total receivables		$ 1,317.60	
Less—Reserve for doubtful accounts		116.13	1,201.47
Inventories—			
Stamped envelopes		$ 343.69	
Economic Essays—at nominal value		1.00	344.69
Total current assets			$ 6,056.03
Investments at Cost:			
Bonds		$36,705.95	
Stocks		44,955.81	81,661.76
Furniture and Fixtures (less reserve for depreciation)			437.39
			$88,155.18

Liabilities, Funds and Surplus

Current Liabilities:			
Accounts payable		$ 3,904.06	
Allied Social Science Associations		829.44	
Income tax withheld from employees		121.50	$ 4,855.00
Deferred Income:			
Prepaid subscriptions		$ 4,507.05	
Membership dues		624.90	
Advertising		34.00	5,165.95
Membership Extension Fund			1,558.22
Fund for Proposed Permanent Secretariat			35.00
Committee Funds Appropriated (not expended)			6,776.50
Life Memberships and Surplus:			
Life memberships		$ 3,750.00	
Unappropriated Surplus—			
Balance December 11, 1944	$68,348.68		
Transferred from life memberships	250.00		
Net loss for year ended December 11, 1945 (Exhibit 2)	*2,584.17*	66,014.51	69,764.51
			$88,155.18

EXHIBIT 2

American Economic Association
Statement of Income and Expenses
Fiscal Year Ended December 11, 1945

Particulars				*Amount*
INCOME:				
Dues—				
Regular, junior and family members.......			$20,031.27	
Subscribing and contributing members.....			228.75	$20,260.02
Investments—				
Interest and dividends:				
Interest on bonds.......................		$ 1,479.99		
Dividends...............................		2,488.85		
		$ 3,968.84		
Less—Custodian's fee..................		106.72	3,862.12	
Gain on sales of securities:				
Bonds..................................		$ 1,918.94		
Stocks.................................		242.88	2,161.82	6,023.94
Total income...................				$26,283.96
EXPENSES:				
Administrative and other operating expenses—				
Secretary's salary.........................		$ 1,500.00		
Office salaries............................		4,103.38		
Annual meeting.............................		1,497.65		
Executive Committee expenses...............		698.67		
Other committee expenses...................		320.49		
Postage expense............................		601.99		
Stationary and supplies....................		373.87		
Insurance premiums.........................		200.00		
Provision for depreciation.................		80.41		
Telephone and telegraph....................		76.31		
American Council of Learned Societies—dues		75.00		
Exchange on checks.........................		40.88		
Miscellaneous..............................		73.33	$ 9,641.98	
Publication expenses—				
Printing of:				
Review...................................		$10,587.55		
Proceedings..............................		4,502.84		
Editor's honorarium........................		2,500.00		
Payments to contributors...................		1,668.50		
Editorial clerical salaries................		3,300.00		
Editorial supplies and expenses............		280.06		
Sundry publishing expense..................		50.64		
Total publication expenses........		$22,889.59		
Less—Publication income:				
Subscriptions, other than members................	$8,455.80			
Sales of copies.............	1,055.88			
Advertising.................	1,651.76	11,163.44	11,726.15	
Total expenses.................				21,368.13
Net operating income...........				$ 4,915.83
APPROPRIATIONS FOR SPECIAL COMMITTEES ($6,776.50 not expended at December 11, 1945)				7,500.00
Net loss (Exhibit 1)............				*$ 2,584.17*

REPORT OF THE MANAGING EDITOR OF THE AMERICAN ECONOMIC REVIEW FOR THE YEAR ENDING DECEMBER, 1945

From July, 1944, to August, 1945, the *Review* was under the management of Professor Fritz Machlup as Acting Managing Editor during my absence as an officer of the United Nations Relief and Rehabilitation Administration at its European Regional Office in London. The Executive Committee will no doubt concur in the opinion that Professor Machlup performed the duties in a most satisfactory manner. I wish to take this opportunity to thank the Executive Committee for granting me leave of absence and making possible what turned out to be a most interesting tour of duty with UNRRA.

In recent years, the annual report of the Managing Editor has made running reference to the relatively small number of satisfactory manuscripts received. This has continued to hold true up to the present time, but there is some evidence of a change in the trend and it is to be expected that over the next two or three years, following the release of many economists from public duties, the amount of manuscripts received will undergo a sharp increase, and it is hoped that the quality will also improve.

In spite of the difficulty just mentioned, the amount of material published has undergone no decrease. In fact, the 1945 volume is the largest yet produced. This has been due in substantial measure to an active editorial policy expressed in two ways: (1) by stimulating the preparation of articles on subjecs of timely interest; and (2) by discovering the existence of documents of interest to the *Review*. The size of the 1945 volume is largely accounted for by a quite unprecedented number of short articles and discussions in the Communications section, in some measure induced by editorial enterprise.

In this connection, there arises a perennial question concerning the degree of editorial enterprise which is appropriate. I take it to be a first principle that the *Review* is, and must be, primarily a "members' journal," publishing for the most part articles voluntarily submitted. There is, however, a constant flow of timely topics the discussion of which in the *Review* ought not to be left wholly to chance, and I take it to be an editorial duty to induce such discussion. My practice has been not to solicit articles for which publication is promised but rather to stimulate the writing of articles without commitment to publish. During my tenure, this practice has not resulted in the failure to publish any really meritorious article voluntarily submitted. Even when the flow of such articles increases, no editorial dilemma will, I think, arise so long as "induced" articles have to stand competition with all others which are available.

A secondary problem arrives in connection with the extent to which the Communications section should be developed at the expense of leading articles. I know of no way of stating an answer to this question in any other terms than editorial judgment concerning the relative interest and importance of available subject matters, but on this, as on all other matters of

editorial practice, I shall constantly welcome the critical comments of the Executive Committee and of the membership of the Association at large.

During the past two years two or three specific instances have arisen which emphasized certain matters of editorial policy and practice with respect to book reviewing, and I have welcomed the interest and constructive suggestions of the Executive Committee. The central question is that of the choice of reviewers on controversial questions and the range of expression permitted them. It is my general view that no policy on this matter is capable of articulate statement other than the choice of unquestionably competent reviewers and the requirement upon them that they clearly and fairly state the argument upon which they are proceeding to comment. The best service that can be rendered to improve this situation is that persons who perceive what appear to them undesirable examples of reviewing convey their critical comments to the Managing Editor. Experience and criticism are necessary concomitants to the improvement of editorial practice.

A statistical summary of the contents of the *Review* in 1945, with corresponding figures for 1944, is presented below, exclusive of the *Proceedings:*

	1945		*1944*	
	No.	*Pp.*	*No.*	*Pp.*
Leading articles	26	454	23	460
Communications	36	170	21	89
Book reviews	125	245	120	283
Classified list of new books		73		63
Classified list of periodical articles		48		35
Classified list of dissertations		13		15
Notes		41		29
		1,058		974

The articles, communications and book reviews were contributed by 159 persons, as compared with 147 in 1944.

The table below presents the actual expenditures in 1945,[1] in comparison with the estimated budget and with actual expenditures in 1944.

	Budget 1945	*Actual 1945*	*Actual 1944*
Printing (paper, postage, reprints, etc.)	$ 8,500.00	$10,167.64[a]	$ 8,747.83[b]
Editorial	2,500.00	2,500.00	2,500.00
Clerical	3,300.00	3,300.00	3,186.50
Supplies	250.00	200.72	195.71
Contributors	1,600.00	1,668.50	1,582.25
Contingency	350.00		
	$16,500.00	$17,836.86[a]	$16,212.29[b]

[a] This figure contains estimated cost of the December number, which (including the cost of reprints) has not yet been billed.

[b] This figure is revised by 14 cents from last year's statement to show actual rather than estimated cost of reprints from the December number.

[1] The expenses shown in the statements of the Managing Editor do not tally exactly with the audited statements of the Treasurer because (a) the latter are for a fiscal year ending December 11 rather than the calendar year, and (b) the Treasurer and Auditor, at the time they close the books, do not know the cost of the December issue and have to include estimates based upon the cost of the September issue, whereas the Managing Editor, at the time of his report, may have received the bill for the December issue, or at least the data needed for a closer estimate.

Expenses in 1945 exceeded the budget by $1,336, almost entirely reflected in the printing costs. Printing costs exceeded 1944 by $1,420. There were two primary reasons for the excess: (1) The average number of copies printed quarterly rose from 5,925 in 1944 to 6,425 in 1945, or 2,000 copies increase for the year. The December, 1945, printing was 6,600. (2) The 1945 volume was substantially larger than the 1944 volume and contained unusually costly engravings. The base contract price for 1944 was $3,474 and in 1945, $4,028 (December estimated), or an increase due to both numbers and size of $554. Increase in paper costs was $450. Increase in 8 and 10 point type and engravings was $373. These three items come to $1,377, or practically the whole increase of 1945 over 1944.

The printing and mailing costs of a volume of 1,000 pages (excluding advertising pages) at present levels of cost and circulation will fall between $9,500 and $10,000. Any increase in costs or in circulation would be additional. On this conservative basis, I recommend the following budget for 1946:

Printing (paper, postage, reprints, etc.)	$10,000.00
Editorial	2,500.00
Clerical	3,300.00
Supplies	250.00
Contributors	1,600.00
Contingency	100.00
	$17,750.00

The contingent appropriation authorized for the publication of a supplement to the *Review* in 1945 was not drawn upon. In view of other possible drains upon the funds of the Association for publication purposes, no request is made for the renewal of the appropriation for 1946.

Some years ago I brought before the Executive Committee tentative suggestions for changes in the format of the *Review* which would make it more attractive to the eye and more easily read. It was necessary to lay the idea aside during the war, but I shall in due course wish to bring the matter up again.

At the beginning of my tenure as Managing Editor, I prepared for the Executive Committee a document suggesting the need of a broader publication program by the Association, and it has been my thought that after the end of the war this subject should be brought up for full exploration. It is of interest to note that two aspects of it are being brought up this year in the reports of two committees: (1) the proposal for a *Review of Economics* by the Committee on Development of Economic Thinking and Information and (2) the proposal to publish statements on economic policy made by the subcommittee on consensus. The discussion of these reports will undoubtedly open up the whole broad question of the Association's publication program, including the relation of such a program to the *Review*. At the pleasure of the Executive Committee I shall be happy to present my views on this subject.

The members of the Board of Editors have during the year given unfailing and invaluable assistance, not only in selection of manuscripts, but also in

counsel upon various matters of editorial policy. The Board has consisted of Professors George N. Halm, Mabel Newcomer, Norman S. Buchanan, Paul A. Samuelson, Kenneth E. Boulding and Paul T. Ellsworth. The terms of Professors Halm and Newcomer expire at the end of 1945, requiring successors to be chosen by the Executive Committee.

With the end of the war and the resumption of regular annual meetings of the Association, plans have been made for a conference of the Board at the Cleveland meetings. It is intended that such conferences shall be an annual feature hereafter, at which questions of editorial policy and practice can be fully discussed.

Respectfully submitted,
PAUL T. HOMAN, *Managing Editor*

REPORT OF THE BOOK REVIEW SUBCOMMITTEE OF THE EXECUTIVE COMMITTEE
APRIL 17, 1945

The Committee, composed of Eveline M. Burns, Frank W. Fetter, and Howard S. Ellis, Chairman, met at noon on March 21, 1945. By the invitation of the Committee there were also present Fritz Machlup and Edwin G. Nourse.

The Committee considered a suggestion that every review be submitted to the author for criticism before publication. The sentiment of the Committee and its visitors was unanimously opposed to such a requirement. The chief difficulty would be the very great delay in carrying out such a process. Some authors are abroad, some books have numerous authors, some authors are completely preoccupied with other things, and occasionally even, authors are deceased. The process of exchange of views between the reviewer and author might drag out almost indefinitely, and even then very often terminate with categoric objection on the part of authors to the appraisals made in the review. It was felt that reviewers would be less critical and candid, and in general capable economists would be reluctant to undertake reviews if this requirement were imposed. However, in considering this proposal the Committee recognized that in some cases reviewers might actually want to allow the author to examine the review in advance of publication; and in these cases the editor might facilitate the process, if that were requested by the reviewer.

The Committee considered also the suggestion that the Managing Editor submit each review, after reading it himself, to some other member of the Board. Dr. Machlup pointed out, however, that this again would make for long delays in the appearance of reviews and that it would almost double the work of the Managing Editor's office. The Committee, however, desires to retain something of this suggestion in the form of the following recommendation to be transmitted by the Executive Committee to the Managing Editor: that, in cases of reviews which for one reason or another appeared to be "doubtful" (suspiciously laudatory, immoderately critical, of uncertain accuracy, etc.), the Managing Editor submit the review in question to another member or other members of his board or to a qualified outsider.

The Committee also believed that a printed "Suggestions to Reviewers" should be drawn up in such a fashion as to guide reviewers in general and warn them of the worst mistakes. The Committee delegated the task of drafting these suggestions to Dr. Burns and supplied her with a number of comments and guiding principles. This draft has been checked over and modified somewhat by the other members of the Committee and by the Acting Managing Editor, and is attached to the present Report.

The two suggestions made thus far are precautionary in their general character. In case grievances nevertheless arise, the Committee believes it is desirable that the Executive Committee request the Managing Editor to

transmit to the President of the American Economic Association all written complaints with reasonable promptness after their receipt.

Respectfully submitted,

EVELINE M. BURNS
FRANK W. FETTER
HOWARD S. ELLIS, *Chairman*

AMERICAN ECONOMIC REVIEW SUGGESTIONS TO REVIEWERS

The growing volume of professional literature in recent years and the increasing specialization in the field of economics have elevated the Book Review Section of the *A.E.R.* to a new importance. More than ever before, professional economists outside their own special fields have to rely upon the judgment of reviewers in appraising the value of a book or document. The responsibility of the Editor, of the Editorial Board, and of the individual reviewer is correspondingly great.

In view of these facts, the Managing Editor and the Board of Editors suggest that prospective reviewers for the *A.E.R.* should bear in mind the following considerations:

1. Within the limits of space allotted, the review should give the reader a brief statement of the content and organization of the book and its relationship to other studies in the field, as well as the reviewer's own evaluation and criticism.
2. While care is taken by the Editor in selecting, from the great number of documents received, those which appear to deserve notice, he would appreciate it if a prospective reviewer, after having read the document, would notify him if the book does not appear to be worth reviewing.
3. In general it is not desirable to utilize any substantial space for itemizing misprints or minor errors and inaccuracies. Where such errors are numerous, this fact can be noted in a sentence pointing out two or three instances.
4. It should be self-evident that a book should be accepted for review only if the reviewer is prepared to read the entire work carefully and to appraise it fairly.

Nothing in the present statement of policy is intended to limit the freedom of any reviewer to express freely his own judgment of the document under review. If in the course of his editorial functions the Editor should find it necessary to suggest changes in content, reviewers are assured that, in keeping with the policy expressed by the Executive Committee, the review as printed will not contain any alterations that have not been approved by the reviewer. Nor is it desired to reduce all reviews to a stereotyped form. On the contrary, it is hoped that the Review Section of the *A.E.R.* will become an increasingly valuable portion of the journal, characterized by vivid personal contributions and by continuous debate and clarification of the outstanding theoretical and practical issues of the times. This objective will be more surely achieved if reviewers will at all times bear in mind their responsibilities to professional readers in the ways which have been indicated.

REPORT OF THE BOOK REVIEW SUBCOMMITTEE OF THE EXECUTIVE COMMITTEE JANUARY 20, 1946

Since its report to the Executive Committee at its meeting in Princeton, April, 1945, the Book Review Committee has not found that the circumstances called for a meeting. We should like to direct the attention of the Executive Committee, however, to a suggestion made informally at an earlier juncture; namely, the desirability of having more book reviews of government documents in the *American Economic Review.* We believe this is desirable in order to make more generally known to economists the wealth of statistical data and analytical studies published by the various government departments. The reviews would presumably indicate the content of the publications and give some professional judgment as to their relevance and significance. Another purpose which would be served by these reviews would be to indicate to government servants the value set upon their studies by professional economists.

The Book Review Subcommittee recommends to the Executive Committee that it devote some attention to this suggestion.

EVELINE BURNS
FRANK W. FETTER
HOWARD S. ELLIS, *Chairman*

REPORT OF THE SPECIAL COMMITTEE ON THE ELECTION OF HONORARY MEMBERS—FOREIGN

REPORT OF THE GENERAL COMMITTEE ON REPUBLICATIONS

The Committee desires to report on the impending publication of one volume and the initial stages of work upon another. The first, entitled, *Readings in the Theory of Income Distribution*, has already gone to the printer and will prospectively be published in May. It is the work of a committee under the joint chairmanship of Professor William Fellner, of the University of California, and Professor Bernard Haley, of Stanford University. It will include an exhaustive bibliography prepared by Mr. Frank Norton and will consist of thirty-two articles and essays previously published in the journal literature.

The success of the venture so far has seemed to warrant continuation with another volume which will be devoted to *Readings in International Trade Theory*. With the help of Mr. Lloyd Metzler, the Chairman has carried on the initial phases of this undertaking, including the preparation of the bibliography. The selection of articles for publication will be initiated within the next few months.

KARL L. ANDERSON
JAMES W. BELL
HOWARD S. ELLIS, *Chairman*

REPORT OF THE SPECIAL COMMITTEE ON THE ELECTION OF HONORARY MEMBERS—FOREIGN

Your Committee, having given further consideration to the report of the committee which served under J. H. Willits in making recommendations for the election of foreign honorary members to the American Economic Association and having considered the action taken with reference to the panel submitted by that committee at the meeting of the Executive Committee of February 2, 1945, makes the following recommendations:

1. That the Association adopt as standing instructions to successive committees on the selection of foreign honorary members the six criteria of eligibility drafted by the Willits' committee. (See *Proceedings*, 1945, page 493.)

2. That the Association consider the names of foreign scholars recommended by the Willits' committee as a panel from which further selections could be made in 1946 and 1947.

3. That not more than three foreign honorary members be elected in any one year.

4. That in 1947 and in each third year thereafter a new committee on nominations of foreign honorary members be appointed by the then president of the Association to report a new panel of names for consideration by the Executive Committee.

5. Besides submitting a panel of names, these committees would be invited to suggest alterations in, or additions to, the criteria of selection submitted by the Willits' committee.

6. In submitting the panel of recommended names, the committee on nomination of foreign honorary members should append a succinct but specific statement of the reasons which led them to the inclusion of each name, with such documentary material as they may think appropriate for the information of the officers and Executive Committee in making their choices.

7. No name shall be included in the panel of candidates except by the unanimous action of the committee on nominations of foreign honorary members. Election shall be by vote of the President, the Vice-presidents, and the Executive Committee, eight affirmative votes being necessary.

8. Names of candidates shall be submitted at the first meeting of each newly elected Executive Committee and election be made at the ensuing spring meeting.

9. Following the election of any foreign honorary member or members, the Secretary of the Association shall prepare a notice of such selection, including a statement as to the character of distinguished work which has led to such selection, this to be included as a special "Note" in the *Proceedings* issue of the *Review* and copies of such "Note" to be sent to the newly elected member along with the official notice of his election. This notice or citation should also be read by the Secretary or President at the business session of the next annual meeting of the Association.

Respectfully submitted,

J. S. Davis
A. B. Wolfe
E. G. Nourse, *Chairman*

REPORT OF THE COMMITTEE ON HONORS AND AWARDS

At the meeting of the Executive Committee last spring, the Committee on Honors and Awards made an Interim Report. This report reviewed the experience of many learned societies with honors and awards. The Committee was instructed to continue its work and to make a final report to the Executive Committee.

The Committee's review of the experience of other associations yields no clear evidence that honors and awards have had a definite effect in stimulating distinguished work. Nevertheless, they may have some effect. The Committee believes that a special award might serve a useful purpose in the American Economic Association. It would give the Association a way of conferring a high honor upon a man without requiring him to assume the burden of the presidency of the Association. The principal responsibility of the President is organizing an annual program. As the body of economic knowledge expands and as the number of specialists in different branches of economics increases, the task of arranging a program becomes more and more time-consuming. It is a task which is not congenial to some men. Furthermore, men who have been absorbed in important economic research may find it quite difficult to keep informed concerning the work of the most promising young men in other fields of economics.

The administrative responsibilities of the presidency have made some men reluctant or unwilling to accept the place. The institution of a special award for work of high distinction would promise to the Association a freer hand in selecting for the presidency each year a man peculiarly suited to the administrative duties of that office. For these reasons, the Committee recommends that the American Economic Association create a special award for the purpose of honoring distinguished work in economics. The specific recommendations of the Committee are as follows:

1. The award shall be made for distinguished and significant contributions to economics. By this is meant that the award shall not be made in recognition of outstanding teaching or of exceptional service in administrative positions either public or private. The award shall be known as the "Distinguished Contribution Award."

2. Consideration of candidates for the award shall be made annually, but the award should not ordinarily be made more frequently than once every three or five years. It is important, in the view of the Committee, that the award should be kept one of high distinction. For that reason, the Committee believes that the award should be made only for work which has high excellence and appears to have lasting importance.

3. Nomination for the award shall be made by the regular nominating committee of the Association. Selection shall be made by the same "Electoral College" which selects the nominee for President. Suggestions for persons to receive the award should be received with the ballots as is now the case in the selection of the President.

4. The selection will ordinarily be made in March or April at the same time that the President of the Association is selected.

5. If the recipient of the award agrees to accept it, he shall prepare a special address for presentation at the next annual meeting of the Association. This address shall be given at the session of the Association at which the award is made and shall be published in the *American Economic Review* together with the President's address.

6. Persons who have been president of the American Economic Association prior to the institution of the award shall not be eligible to receive it. Persons who are elected president after the institution of the award, however, shall not be barred from consideration. Nor shall receipt of the award bar a person from being selected president of the Association.

A word should be added in explanation of the last condition. To make past presidents eligible for the award might unduly restrict the opportunities of the Association to recognize distinguished work by men who have not held the presidency. It would be a mistake, however, in the judgment of the Committee, to bar from the presidency persons who are given the award. This might lead to a misinterpretation of the significance of the award; that is, it might foster the belief that the award was a sort of "consolation prize" for persons who were not nominated for the presidency. The Committee believes that would be quite unfortunate. The award, in the judgment of the Committee, should constitute an honor comparable to that conferred by the presidency.

Respectfully submitted,
SUMNER H. SLICHTER, *Chairman*

REPORT OF COMMITTEE ON ECONOMISTS IN THE PUBLIC SERVICE

The Committee on Economists in the Public Service was established to investigate the following question: "What are the trends in professional competence of economists in the public service and what can be done to improve the standards of professional competence?"

The Committee herewith submits a report in two parts. Part I is a description of the present status of professional work in the field of economics in the federal public service. Part II presents recommendations for improving professional standards for work in economics in the federal service.

I. Present Status of Work in Economics in the Federal Service

The three lowest grades[1] in the federal professional economic service are: P-1 Junior Economist (entrance salary $2,320 per year); P-2 Assistant Economist (entrance salary $2,980 per year); P-3 Associate Economist (entrance salary $3,640 per year). Before the war approximately the following standards applied to these grades. Entrance to the lowest grade has required a bachelor's degree with a major in economics, or its equivalent in training or experience. A year's successful experience in grade P-1 has qualified the incumbent for promotion to grade P-2, provided a vacancy at P-2 was available. Similarly a year's successful experience in grade P-2 has qualified the incumbent for promotion to grade P-3. These three grades are thus approximately at the same professional level as graduate work in a university. Both are postgraduate; both are below the level of full professional competence. However, from a financial point of view the federal positions were in general more attractive than the assistantships or part-time teaching positions available in connection with graduate work even before the recent salary increase.

The upper grades[2] in the classified professional service range from P-4 Economist (entrance salary $4,300 per year) to P-8 Chief or Head Economist (entrance salary $8,750 per year). For each grade a year's successful experience in the next lower grade has been acceptable as qualifying a person for entrance.[3] However, it would normally take a person considerably more than seven years from entrance into the grade P-1 to qualify for grade P-8. Unless a vacancy is available, a new job must be set up before a person can be put into it.

If on the basis of an employee's record (his formal efficiency rating may or may not be taken into account) the appointing agency is prepared to take steps for his promotion from one grade to the next higher grade, it

[1] Recent practice has been to drop the qualifying adjectives, "junior," "assistant," "associate," "senior," etc. The salary scales were increased effective July 1 to the figures here given.

[2] *Idem*.

[3] In general in determining the eligibility of a candidate for a given federal job, the Civil Service Commission passes judgment on the extent, quality, and appropriateness of his experience and training. Within the limits permitted by the Civil Service Commission certification procedures, judgment of a candidate's ability or competence as such is left primarily to the appointing agency.

must establish his qualifications before the Civil Service Commission. But prior to so doing, there are two administrative prerequisites to setting up a new job. The appointing agency must have funds available to cover the salary increase involved. Under the Classification Act the agency must also prepare and submit to the Civil Service Commission a job description for the new job, and the Commission must classify the job. The Commission may find that the new job is not a grade above that now occupied by the employee the appointing agency proposes to promote, or even that it is a nonprofessional job.

Eight major considerations which the Commission takes into account in classifying the level of a job may be cited. In general the level of a job is deemed to vary directly with: (1) the level of the profession or administrative officer to whom the incumbent reports; (2) the levels and numbers of persons reporting to the incumbent; (3) the extent of authority delegated to the incumbent to make commitments on behalf of the agency; (4) the levels of those in other agencies with whom he has contacts; (5) the difficulty of the work performed and the extent to which originality is required of the incumbent; (6) the breadth of the field with which he is concerned; (7) the length of previous experience or training required for proper performance of the job. And to vary inversely with: (8) the extent to which rules have been established to guide the incumbent in his work.

The assignment of jobs to the various grades, P-1 through P-8, thus draws sharp administrative lines as between the several professional levels, somewhat as lines are drawn in academic life by academic ranks. However, for any of the grades above P-4 it is not at present possible to establish even a rough correspondence with academic positions, in respect to the level of professional competence involved. Moreover, one may question how satisfactorily the lines drawn between job levels in the federal professional service for administrative purposes reflect differences in levels of professional attainment. A similar question can be raised respecting academic ranks.

In the academic world sharp lines are drawn not only as between levels of competence but also as between fields of competence. In the federal public service—so far as economists are concerned—no correspondingly sharp lines are drawn between fields of competence. This is true not only within the field of economics, e.g., between work in banking and work in railroads, but it is true also as between economics and other lines of work, e.g., between purely professional economic positions on the one hand and partly administrative work, or partly executive positions, or positions involving detailed familiarity with a particular industry, or the managing of a statistical office on the other hand. Moreover, positions vary in the proportions of their professional content: one P-8 may be exclusively an economic research job; in another job policy or administrative functions requiring professional training or experience may be predominant; and the proportion of professional content in a job may vary from time to time. Professional economic competence may be important for positions classified in the clerical, administrative, and fiscal services.

The absence of clear-cut field-delineation makes for an absence of com-

partmental-mindedness in social science positions. But it also strengthens the temptation to shift from professional to policy and administrative work. The converse type of shift is also possible—to a professional job from a related nonprofessional assignment. Thus a substantial number of persons have entered important economic posts in the federal service with little or no formal graduate training in economics. Both promotion from one grade to another and horizontal shifts from nonprofessional to professional assignments at the same level have contributed to this development. Indeed there is reason to believe that, even before the war, there had been an upward trend in the proportion of government economists with little or no graduate training in economics.

Because of the absence of field-delineation it is not possible to say how many economists the federal government employs. The last available figures on classified positions (mainly in Washington) in various professions relate to May, 1939, and, because of the absence of clear delineation between fields and variations in job titles, they are only rough approximations. They are based on a sample of classified positions. Probably most economists at grades P-4 and above at that time were included in the following general groups in this study: 291 business and other economists, 324 agricultural economists (exclusive of agronomists, etc.), and 320 social economists.[4] The latter group may include some economists although it was probably made up mainly of sociologists and social workers. There were also 166 statisticians, at grades P-4 and above, some of whom would be regarded by the profession as economists.

The Examination Division has occasion to define an "economist" each time it announces a general examination in the field. Thus, in Announcement No. 129 (September 19, 1940) it states the duties of an economist as follows:

> To initiate, plan, direct, co-ordinate, conduct, or assist in conducting professional economic research in the field of one or more of the optional subjects chosen from the list at the head of this announcement, including the collection, compilation, evaluation, analysis and interpretation of basic data and the preparation for use or publication of the results thereof; to represent the employing agency in establishing and maintaining working relationships with other federal or state agencies engaged in similar activities; to supervise professional and clerical workers of lower grade; and to perform related work as assigned.

The optional subjects referred to were as follows:

> (1) Analysis of General Economic and Business Conditions, (2) Consumer Problems, (3) Economic Theory, (4) Government Regulation of Business, (5) Housing (including Urban Land Economies), (6) Income and Wealth Analysis, (7) Industry Studies, (8) International Trade and Finance, (9) Labor Economics, (10) Marketing, (11) Money, Banking, and Investment Finance, (12) Population Problems, (13) Price Theory and Analysis, (14) Public Finance, (15) Public Utilities and Communications, (16) Social Insurance, and (17) Transportation.

At least one difference between this definition of an economist and that employed by the Classification Division may be noted. According to the latter, a specialist in public finance is classified in the clerical, administrative, and fiscal services. Presumably none of the government economists

[4] An unpublished report prepared for the President's Committee on Civil Service Improvement, 1939.

then engaged in work primarily in the field of public finance was included under the 291 business and other economists referred to above.

For a full understanding of the operation of the processes of appointment and classification as applied to professional economist positions it is important to take account of the human resources at the disposal of the Civil Service Commission. The Commission avows the principle that questions of the level and field of professional competence should be determined on the basis of the judgment of professionally competent persons. But financial and other administrative factors—including the operation of Selective Service—have hampered the Commission's program for developing a professional staff in the field of economics. The Classification Division has never had a full-time economist to deal with the classification of economist jobs, although it avails itself of the services of economists as consultants from time to time. Some years ago, the Examining Division established an economist job (and several other professional positions) in the grade P-6, entrance salary now $6,230, in order to strengthen its professional staff. This examiner[5] has been assisted by several persons in lower social science classifications. His responsibilities extend to various related fields: statistics, business analysis, sociology, geography, etc. Little or no specialization of responsibility within the field of economics has been developed, except possibly for agricultural economics.

One aspect of the nature of most government economist positions—or rather of the nature of the assignments involved—calls for special comment. Partly because the end-product of economic research is often the preparation of a memorandum for an executive to meet a deadline measured in days (or even hours) or the maintenance and improvement of a current monthly or weekly statistical measurement, partly because administrative responsibilities are frequently combined with professional responsibilities, many government economists have too little time for the consideration of longer-range problems and for keeping up with the broader developments in the field of economics. In this respect academic positions have a distinct advantage both because of longer vacations and because of sabbatical leaves. Too often, even before the pressure of work occasioned by the war, a government economist tended to live on his intellectual capital and to find little opportunity for a broader intellectual development.

II. Recommendations for Improving Professional Standards

During the past thirty years the role of economists in the federal public service has been of ever increasing importance. There has also been a marked upward trend in the number of government economists. Although the growth of this group of professional employees has not been recorded statistically, it is known that it was sharply accelerated during World War I, again during the Great Depression, and still again during World War II. Further, the knowledge of economic conditions and of economic processes possessed by professional students has come to be relied upon increasingly by government executives and administrators.

[5] For a time there were two such examiners.

This Committee is of the opinion that these trends will continue in the years ahead. The responsibility that will rest upon government economists will clearly be much greater than in any previous peacetime period. The complex postwar social and economic problems with which the government will have to deal will call for competence of a correspondingly higher order.

Since the government will necessarily continue to rely on economists whose professional competence is to an important extent the result of their professional experience in federal posts, a major part of the problem of assuring properly qualified economists in that federal service is the provision of improved procedures affecting the experience.

The problem of assuring properly qualified economists has been complicated by various wartime developments including: (1) wartime upgrading and a substantial increase in the proportion of incumbents of federal professional positions who have had relatively little off-job professional training; (2) liquidation of professional economist positions in emergency agencies and units; (3) veteran's preference as applied to a greatly increased number of veterans.

The problem of providing professional personnel of high competence should be approached in part through procedures during the present transitional period from war to peace. But it is essential that it be approached also through modifications in permanent personnel practices of the public service. The upgrading that has taken place during the war, and the temporary modification of previously established procedures should be made the occasion for the permanent establishment of standards of competence on a new high level. It is desirable that some of the personnel of emergency agencies be placed in permanent agencies, but such temporary adjustments will not meet the long-run requirements unless there are important modifications in the personnel procedures designed to insure an improvement of professional standards.

In view of the considerations set forth above the most urgent needs for improving professional standards for work in economics in the federal public service appear to be: (1) the provision of field-delineation, not on a narrow specialty basis, but as between professional work in economics on the one hand and other types of work, particularly nonprofessional work, on the other hand; (2) the implementation of the principle that on questions of the level and field of professional economic competence there should be adequate procedures to make available the judgments of professionally competent persons; (3) provision of adequate opportunities for economists in the federal service to keep up with their profession and to develop professionally.

In order to accomplish these purposes the following recommendations are offered:

1. That the Civil Service Commission establish and maintain a list of those positions, P-4 or CAF-11 and above (hereinafter called "listed positions"), the work of which is preponderantly professional work in the field of economics.

2. That after the establishment of such a list the following conditions be

required for each new appointment to a listed position, in addition to requirements now in force: (a) The candidate should be required to establish that he has done a substantial piece of competent, independent economic research, the results of which are set forth in a written report a copy of which is permanently on file with the Commission or in a library approved by the Commission for the purpose; (b) the candidate should be required to establish that he is professionally, competently conversant with the current status of work in two broad phases of economics other than the phase of economics with which his qualifying independent research is concerned.

These two recommendations are complementary. If field delineation for economics as a whole is to be accomplished, it is essential both that professional economist positions be identified as such, at least for the higher grades, and that there be provision for distinguishing a person who has professional competence in economics from persons of the same level of competence in other lines of endeavor. Listed positions would need to be reviewed from time to time to determine whether the work they call for continues to be preponderantly professional work in economics.

3. That promotion to a higher grade from a grade of P-6 or P-7 (or CAF-13 or 14) for listed positions be made primarily on the basis of the professional attainment of the incumbent and without regard to the level of any noneconomist he contacts, supervises, or reports to, and without requiring any broadening of the field of his responsibility, provided always that the incumbent's position continues to be a listed position.

It is believed that this recommendation would add materially to the effectiveness of the field-delineation above proposed, and would focus attention in questions of promotion on professional considerations rather than on "pyramids" and "ceilings." It would also emphasize the need for individual consideration in each case.

4. That in order to implement more fully for the field of economics, the principle of making available on questions of professional competence the judgments of professionally competent persons, the Civil Service Commission should establish a system of committees, selected from a panel of both government and university economists of high professional standing, the functions of these committees to be to give the Commission the benefit of purely advisory judgments on questions pertaining to levels of professional competence in economics referred to them by the Commission: (a) when a federal employee or an applicant for a federal position appeals on grounds involving such a question, or (b) when an appointing agency appeals on grounds involving such a question, or (c) when the qualifications of a candidate for appointment to a listed position are challenged by an incumbent of another listed position, or (d) when for any other reason the Commission decides to refer such a question.

The Commission will never be so well staffed that all of the work of examination, certification, and classification for a professional position in a given field of economics can be done by Commission officers and employees whose professional competence in the specialty involved is at least equal to that called for by the position itself. Such an arrangement would be unde-

sirable even if it were possible. On the other hand it is difficult to provide general rules defining those parts of the Commission's work for which it is important that the principle of at least equal competence should operate.

It is urged that provision of procedures for appeal and challenge along the lines of recommendation 4 would insure recourse to professional opinion of at least equal specialized competence at those points where such recourse is most needed and at the same time permit the handling of other questions by other personnel. The findings of committees of economists of high professional standing would be purely advisory and would be confined to questions of levels and fields of professional competence.

5. That statutory provision be sought which would authorize and enable employing agencies to grant something analogous to sabbatical leaves to incumbents of listed positions and of equivalent positions in other professional fields, such leave to be used for professional development only and to be on a pay-during-leave basis.

This last recommendation would require new legislation. It is believed that the other four recommendations could be effectuated by administrative action under existing statutes.

The first four of the above recommendations have been made with specific reference to the professional field with which the Association's Committee is concerned, although their nature suggests the possibility of application to other professional fields.

It is understood that some consideration has been given to the possibility of the appointment by the Civil Service Commission of an advisory committee on social science, analogous to the advisory committee it has established on administrative positions. If the above proposals are to be carried out there would be need for the advice of such a committee in planning detailed arrangements and procedures.

The above recommendations are necessarily directed to the Civil Service Commission rather than to the Association. It is hoped that the officers of the Association will transmit these recommendations to the Civil Service Commission without Association comment, as recommendations not of the Association but of one of its committees.

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REPORT OF THE COMMITTEE ON RESEARCH

Your Committee on Research was created by the Executive Committee, at its meeting in April, 1945. The Committee was to consist of the representatives of the American Economic Association on the Social Science Research Council and on the National Bureau of Economic Research. The Committee, moreover, was given the privilege of increasing its membership by not more than three additional members. President Sharfman designated Simeon E. Leland as Chairman of the Committee; the other three members are Edwin G. Nourse, Joseph J. Spengler, representatives on the Social Science Research Council, and Donald H. Wallace, representative on the National Bureau of Economic Research.

Your Committee has considered the problem of enlarging its membership but decided to postpone action on this for the present. It has, however, invited several members of the Association to attend meetings and has found that the plan of co-operation has been very useful. This policy will be followed in the future in order to give the Committee the fullest possible benefit of suggestions from other members of the Association.

In his notice of appointment to the Committee, President Sharfman charged it with the performance of three duties: "first, to co-operate with the Social Science Research Council and other associations in promoting economic research; second, to discover and develop new promising research projects and seek ways and means for securing financial support for such projects; third, to make suggestions of ways and means of improving research."

During the past year, three meetings of the Committee were held, two in Washington; the third, in connection with the meeting of the Social Science Research Council, at Carmel, N. Y.[1] These meetings were held without expense to the Association but it is requested that the Association consider making an appropriation to cover the necessary traveling expenses of members to regular meetings of the Committee. It should be said that the Committee will continue to hold its meetings at such times and places as will occasion the minimum of expense. But the traveling expenses of individual members should be recognized as a regular obligation of the Association. Such an appropriation will regularize the informal assurances given subsequent to the Executive Committee meeting by President Sharfman and Secretary Bell.

At the first meeting of the Committee on Research, it was agreed that an inventory of research in process or of research techniques was futile, expensive, and time consuming. It was, therefore, decided that the Committee would center its work, in the beginning, on gaps not covered by current economic research programs and on shortcomings in current procedures. The purpose would be to promote research in these gap areas, and to promote a clearer definition of concepts, greater accountability for conclusions

[1] Dates of meetings were June 15, 1945 (Washington); September 11, 1945 (Carmel); October 27, 1945.

drawn from statistical and other evidence, and the maximization of recognized agreement in areas where measurable consensus might be attainable. It was decided to give particular attention (1) to issues of analysis, and applications, such as might emerge from recent wartime experiences, and (2) to the selection of specific areas of "hot-spot" or growth-area studies by special subcommittees, or otherwise, as might be feasible. These approaches would doubtless involve new fields of investigation, new conceptual formulations, and, perhaps, new or modified methodological devices.

The development of plans for such studies constitutes a part of the long-run work program of the Committee. Specific plans will have to be developed and as this is done report will be made to the Executive Committee. However, a first step in the development of such a program has been taken through a Questionnaire on Research recently sent to the entire membership of the Association. As this report is being written, copies of the questionnaire are being returned each day. Unfortunately the results will not be tabulated in time for the present meeting but a special report on the questionnaire will be made. It is planned to present such a report to the editors of the *Review* for printing.

In connection with the preparation of the questionnaire, the Committee desires to record its thanks to President Sharfman and Secretary Bell for making available the $250 to print and circulate the questionnaire and the "necessary expenses" for tabulation, all of which will be handled through Secretary Bell's office, unless the tabulations can be handled without cost to the Association in some other manner. This we will endeavor to accomplish.

At its first meeting, the Committee became greatly concerned over what might happen to various records of interest to economists, and invaluable for future research, in the offices of temporary war agencies whose activities were being abandoned and whose staff was being released or transferred. Much of this material, accumulated at great cost, was in danger of being lost, or stored so as to be completely inaccessible, while other material whose value was known largely to staff economists alone might never be revealed to the profession as a whole. Some agencies, it was feared, would not realize the significance for economic research of some material in their files. It was the opinion of the Committee on Research that these records might be of utmost future value for analysis that would advance our understanding of the functioning of our economy in peacetime and would certainly illuminate the actual functioning of our economy in wartime. The danger that these materials might be lost prompted the Committee to take speedy action.

Your Committee discovered that the Conference on Price Research of the National Bureau had created a special committee under the chairmanship of Corwin Edwards to co-operate with certain public agencies in the preservation of economic records. This committee of the Conference on Price Research had employed Saul Nelson to see what could be done. Your Committee early concluded that the actual work involved in preserving records and in filing or storing them so as to make them available

to economists would have to be done by the governmental agencies themselves and that economists could be of greatest service if they indicated what records should be preserved and then stimulated the appropriate agencies to undertake this task. Later, economists or special committees could give advice as to the use, sampling, tabulation, etc., of the material. Just what could be done in each case would have to be determined by contact and co-operation with the appropriate public agency. After much discussion, the Research Committee recommended the creation of a subcommittee to work on the preservation and use of wartime economic records. President Sharfman, however, requested this Committee to undertake the task. This we have attempted.

Through the generosity of Edwin G. Nourse, the Brookings Institution agreed to make available to the Association, for several months, the services of Harold B. Rowe, so that an investigation might be undertaken of the status of records in OPA, FEA, and other agencies, the available time and money permitting. At the request of this Committee, the Executive Committee made available the sum of $750 for this exploratory work, the excess above this sum to be provided by Brookings. The Executive Committee also appropriated to us an additional $750 to be used, at the discretion of the Research Committee, in investigating problems in connection with the preservation and use of records in agencies such as MPC, WLB, PAW, ODT, War Food Administration, Maritime Shipping, and other agencies. To date of this writing, the sum of $250 has been expended for services of Mr. Rowe; no obligations have as yet been incurred against the "discretionary" portion of the Committee's appropriation.

At the round table scheduled by the Committee for January 26, 1946, Mr. Rowe will make a report on the preliminary results of his investigations.

Meanwhile, your Research Committee has endeavored to organize various subcommittees to undertake the work of stimulating the preservation of records in special fields. Joseph Bain, of the University of California, has agreed to organize a subcommittee to explore the preservation and use of records as to petroleum products and solid fuels. G. Lloyd Wilson, of the University of Pennsylvania, has taken charge of a similar undertaking in the field of transportation. As yet the complete personnel of these subcommittees has not been chosen. An announcement covering this will be made at a later date. An effort has also been made, by correspondence, to set up a similar subcommittee to look into records in the field of labor and personnel relations, but although several men have agreed to serve on such a committee a willing chairman has not been found.

In September, President Sharfman asked the Committee on Research to represent the Association in meetings with the Social Science Research Council and other groups, at which the role of the social sciences in connection with federal grants-in-aid for the promotion of scientific research was being discussed. Dr. Nourse was designated as the special representative of the Association and of this Committee in connection with these matters. It should be noted that on October 29, 1945, Mr. Nourse appeared

at the Committee Hearings on S. 1297 and Related Bills and made a statement, on his own behalf, with respect to economic and related research in the social sciences. At the Round Table on Research in Cleveland, on January 26, 1946, Mr. Nourse will present a report on the current status of federal legislation and interest in research, as it applies particularly to economics and the social sciences.

Finally, your Committee on Research desires to record the hearty co-operation it has received from the officers of the Association and from fellow economists who have freely given their time to help make the work of this Committee a success.

Respectfully submitted,
SIMEON E. LELAND, *Chairman*

FINAL REPORT OF THE COMMITTEE ON DEVELOPMENT OF ECONOMIC THINKING AND INFORMATION[1]

Establishment and Task of Committee

The Committee on Development of Economic Thinking and Information was established in the spring of 1945 to plan a periodic or an annual *Review of Economics* (hereinafter called *R.O.E.*). The resolution providing for the establishment of this Committee, which was adopted by the Executive Committee of the American Economic Association at its April, 1945, meeting, reads as follows:

> That the project for periodic reports on the development of economic ideas and data be regarded as separate from any general exploration of research problems; that as a first step in this project a volume be prepared, summarizing the development of economic thinking and information since 1939, this volume being regarded as an experiment in a technique which might be used for subsequent similar periodic reports; that a committee be appointed to formulate a plan for this volume—that is, to determine its scope and timing and make recommendations as to its editor; that the President be empowered to appoint the editor, and to delegate to him full charge of the preparation of the volume; that upon the appointment of the editor the committee become an advisory committee to him and that the cost of the project to the Association shall not exceed $5,000.

The report that follows is made pursuant to and in consistence with this resolution. The plan outlined diverges, however, from that conceived of in this resolution in that it recommends the appointment of a board of advisory editors by the President upon the advice of the editor.

I. *Function of a Periodic or an Annual Review of Economics*

The *R.O.E.* (these initials designate the projected review, whether it be planned to appear every year or at longer intervals) is intended to provide at periodic intervals a discriminating and critical summary of the *significant* findings of fact and of the theoretical advances in each of the fields of economic specialization identified in Section II of this report. This summary will be intended primarily to serve not the wants of the specialist in the field covered but the wants of the economist who, while not a specialist, is interested in keeping informed regarding factual and theoretical progress. For example, the summary of developments in the field of population and related problems will be designed to serve the wants of specialists in fields other than that of population (e.g., public finance, economic history). Stated broadly, the function of the *R.O.E.* will be to enable every intelligent economist to know, at a comparatively small cost in time, what he ought to know about major developments in the more important areas of his science.

The Committee at first contemplated recommending the preparation of a two-volume report covering the developments in economics since 1939, to be followed at annual intervals by a single volume devoted to the developments during the year preceding. However, because of the many editorial and related difficulties attendant upon the production of an annual review volume, the Committee is not yet prepared to recommend trial plans for

[1] This report takes into account the discussion of its proposals by the participants in the round table devoted to this project. See page 784.

such an annual volume. It proposes, instead, that a review (preferably two volumes in length) covering the period since 1939 be prepared, and that plans for subsequent periodic reviews be formulated in light of the experience gained through the preparation of the review dealing with the period 1939 through 1946.

A critical summary review and assessment of significant factual and theoretical developments in each field of economic specialization in the period 1939–46, will serve a number of purposes. First, it will facilitate the transfer of economists and advanced economics students from the armed services and governmental war agencies to the peacetime fields of teaching, research, and administration. It has not been possible for many of those working under the high-pressure and otherwise uncongenial conditions prevalent in the armed and governmental services since 1940 to keep abreast of developments in the various branches of economics, or even to continue in mastery of their own fields of specialty. Second, six years of war have denied to the economists of other lands, and of Europe in particular, the opportunity to keep up with the post-1939 developments in economics elsewhere, and particularly in the English speaking countries. No publication would be better calculated to repair this gap and to re-establish the international brotherhood of economists than a review such as this report contemplates. The Committee believes, therefore, that American economists can do a real service to their coworkers in other lands by preparing and distributing such a report.

The present is an age of specialization in the field of economics. This field is becoming ever more broken up into parts, and economists themselves are becoming ever more specialized. This specialization is being purchased at the cost of adequate comprehension, on part of the typical economist, of other branches of economics. More than ever, therefore, there is need for a new synthesis. A periodic review such as this Committee contemplates will permit an economist to develop some measure of synthesis for himself. A third purpose which this review will serve, therefore, will be to guard the economist against unbalanced specialization, to offset the untoward effects of the fragmentation of economic knowledge, and to facilitate, on the part of all economists, a more effective synthesis of economic science. It will enable the specialized economist to keep passingly conversant, at a minimum outlay of time, with developments and literature in other fields at least some of which should remain known to him.

Fourth, a periodic review will enable economists who are engaged primarily in administration to keep in touch with the leading developments in economics. Administrators are hard pressed to remain conversant with a number of fields of economics. Yet they are called upon frequently to make decisions which, if they are to be intelligent, must be based upon an understanding of several fields of economics. The *R.O.E.* will help to provide economic administrators with such understanding.

Fifth, many noneconomists (e.g., political and other social scientists, business and other leaders, editors, statesmen) need to understand in some measure the changes which economics undergoes in content and in implica-

tions for public policy. These noneconomists require this information because they fill positions of public trust, or because the decisions which they make with respect to public matters turn on economic knowledge. At present these noneconomists are not conveniently provided with this information. It would be supplied in a periodic review.

A review covering the period 1939–46 will satisfy all these needs. Periodic reviews of developments after 1946 will serve purposes other than the first two.

It will not be an *R.O.E.* author's responsibility to provide a bibliography relating to the field covered by his article; in fact, since he will summarize and assess only the significant books, pamphlets, reports, and articles and omit all reference to works which are not significant, it will be his responsibility not to provide a bibliography of the field covered. Bibliographical matter is already published in the *American Economic Review*, and in other specialized journals (e.g., *Journal of the American Statistical Association*, *Journal of Economic History*) and by bibliographic services. Moreover, if it is felt that governmental documentary material is not adequately covered at present by the *American Economic Review*, coverage therein may be expanded. In general, the critical summaries done for the *R.O.E.* will not be essentially bibliographical in character as are, for example, the essays in bibliography and criticism carried by the *Economic History Review*, or the bibliographical articles found in the *Year's Work in English Studies*. On the contrary, these summaries will be critical, integrated, and interpretative assessments of fact and theory calculated to give the nonspecialist insight into the nature of current developments and significant recent contributions in given fields. In consequence, these critical summaries cannot be bibliographical in character; but they will provide the reader with highly select bibliographical matter and with indications where factual matter is to be found, and they will call to his attention new statistical series and newly available types of documents.

No economic journal at present performs the function it is intended that the *R.O.E.* perform; nor has this function been generally performed in the past by any economic journal. The program most closely analogous to the one here contemplated was that conducted by *Econometrica*, in 1933–39. This journal carried four annual surveys a year, ranging in length from five to sixty-seven pages, and devoted, respectively, to "general economic theory," "business cycle theory," "statistical technique," and "statistical information." This survey program was discontinued in 1939, in large part because it proved very difficult to secure competent economists to undertake the surveys. As a rule, an individual article in this program dealt with a small segment of the field covered, was quite technical, and occasionally included new contributions to the field in question. The contemplated *R.O.E.* articles are intended to be less technical, less "original," and of broader scope than the *Econometrica* surveys. An article by A. B. Wolfe ("The Population Problem since the World War," *Journal of Political Economy*, XXVI, 1928, pages 529–559, 662–686; XXVII, 1929, pages 87–120) illustrates what might be done; but it is longer than an *R.O.E.* article is intended to be.

II. *Classification and Division of Fields of Economic Specialization*

Intelligent and successful management of a *R.O.E.* particularly after the 1939–46 review has been completed, presupposes the adoption of a practicable and somewhat flexible scheme for classifying, or dividing, the broad area of economics into a manipulatable number of fields of economic specialization which do not unduly overlap. Without such a scheme the editor could not make assignments, while a contributor could not give appropriate scope to his critical summary.

The classification scheme which we propose below was developed in light of the shortcomings and advantages of alternative schemes. For example, the 21-field scheme employed in the *American Economic Review* for classifying book reviews and bibliographic materials proved too heterogeneous and overlapping to meet the different requirements of *R.O.E.* Other schemes were developed only to prove defective.

The classification scheme which is outlined below is to be viewed only as a suggestion. At most, this scheme, or any alternative scheme, can be no more than an editorial administrative device designed to reduce overlaps, to give unity to each survey article, and, in general, to facilitate realization of the ends proposed in Section I. The editor of the 1939–46 review volume must be absolutely free to modify as he sees fit the scheme outlined below, or to substitute in its place one of his own devising. The scheme finally adopted should, however, be suited to accomplish the purposes of a *R.O.E.* as outlined in Section I.

Experience with an initial 1939–46 review project will suggest what type of classification scheme should be adopted to give order to a continuation after 1946 of a periodic review project. For only in light of this experience and in view of the kind of review project adopted after 1946 can an appropriate classification scheme be set up.

The managing editor of the 1939–46 review upon assuming his editorial post should prepare a careful, general statement of the objectives of a critical summary article, together with both indications as to how it should be done and a description of the classification scheme in terms of assignments planned. This statement should be transmitted to prospective authors and to others who will in any wise participate in the preparation of the review. This statement should include, or be accompanied or followed by, a guide as to style and as to the system of space-saving reference symbols adopted.

Considerable care and skill will be required of contributors if they are to provide effectively integrated and interpretative assessments for the non-specialist; and of the managing editor and his associates, particularly in the first two years of the project, if they are to give real unity and uniformity of pattern to the project as a whole.

Experience will disclose to the editor and the contributors what is the best way to handle the literature of a given field. It has been suggested, for example, that the materials to be dealt with in surveys of literature fall into three main classes: (a) the conceptual, or purely theoretical, e.g., field A.1, or portions of fields A.5 and A.7; (b) the institutional, which relates primarily to the growth and structure of the institutions treated, e.g., an

account of the growth and structural character of the institutions established to implement the Bretton Woods Agreements; and (c) the factual, e.g., a descriptive account of the international balance of payments, or of family budgets and spending patterns. Should the subject matter treated fall into three categories of this sort, or into any useful alternative set of categories, and should it be found that in given fields one or two categories of subject matter predominate, the manner of treatment of these fields may be adapted thereto in later periodic reviews. In any event, whether or not the materials treated prove classifiable in the manner suggested, the method of treatment employed upon the materials in a given field should be adapted to the nature of the materials customarily found therein.

The scheme for classifying the fields of materials to be covered, together with an explanation of this scheme, follows:

A. *General Economics.*
- A.1 Economic Theory (Production, Price Formation, Monetary, Consumption)
- A.2 History of Economic Doctrines
- A.3 Consumer Economics
- A.4 Economic History
- A.5 Levels of Employment and Economic Activity and Fluctuations Therein
- A.6 International Economics: International Division of Labor, Exchange, Finance, Institutional Arrangements, and Economic Controls.
- A.7 Economic Organization and Structure: Theory and Practice

B. *National Planning Economics: Theory and Practice.*
- B.1 In Mixed Economies
- B.2 In State or Totalitarian Economies
- B.3 In Predominantly Free Enterprise Economies

C. *Public and Quasi-Public Economics.*
- C.1 Public Finance and Taxation
- C.2 Public Operation, Regulations, and Control
  - a. Public Corporations
  - b. Public Utilities and Patents
  - c. Private Monopolies, Quasi Monopolies, etc.
  - d. Securities Distribution; Financial Institutions
  - e. Agriculture
  - f. Miscellaneous
- C.3 Social Security

D. *Operational Economics.*
- D.1 Production, Marketing, and Price Policies and Practices
- D.2 Banking and Finance (other than Public Finance)
- D.3 Industrial and Labor Relations, Trade Unionism, Labor Legislation.

E. *Resources.*
- E.1 Resource Supplies, Population Movements, The Location of Economic Activities and Population

F. *Residual.*

It is probable that the preceding categories do not provide for all subjects that require treatment, particularly if periodic reviews are planned subsequent to the 1939–46 volume. The literature of accounting will call for frequent review; that relating to specific industries may require treatment; and that relating to highly specialized literature—e.g., the history of the business corporation—may occasionally need assessment. Category F is designed to accommodate these needs.

This classification scheme can be suited to serve the needs of the 1939–45 review project, or another and presumably shorter program can be devised in its place by the editor. Should it be determined to continue the review of literature project after the 1939–46 volume (or volumes) is completed, the classification problem may be re-examined in the light of experience.

The Committee at first included an additional category to provide for annual surveys of economic conditions, events, policy changes, etc., in the United States and in the world as a whole in the belief that such surveys would add to the reader appeal of a periodic review and would prove very helpful to teachers of economics. It was decided, however, that such factual surveys would present a quite different administrative problem for a periodic review volume and might duplicate work now being done or to be done by established American and international agencies. Some economists have suggested, nonetheless, that factual surveys may be provided in a separate publication established for this purpose. It is suggested, therefore, that the Executive Committee explore this matter further.

Category A, of "General Economics," is designed to cover, *insofar as is practicable*, the literature dealing with subject matter whose nature approaches the general and the universal more closely than the particular and the circumscribed. Field A.1 includes all aspects of pure and universal economic theory except those which, under the circumstances, can better be treated under A.5, A.6, A.7, or B. The content of fields A.2 and A.4 is self-evident. Field A.3 covers all literature (other than that relating to the pure theory of consumption) which centers about the consumer, his behavior, his organizations, and his safeguarding. Field A.5 includes all literature, "business cycle" and other, which has to do with levels of economic activity, employment, and intensity of resource use, and with the determinants of these levels. Field A.6 covers all aspects of international economics and economic relations. A.7 is intended to deal with literature on (i) the theory of economic organizations and structures and (ii) related practice insofar as it illuminates theory; in large measure, the practical aspects of economic organization will be dealt with under B, C.2, D, and A.6.

Under category B will be included all literature relating to the theory and practice of "national planning." Since this literature appears to fall into two distinct subclasses, that relating to "mixed" economies and that relating to state-dominated or totalitarian economies, fields B.1 and B.2 have been provided. If experience reveals, as it may well do, that the literature dealing with "mixed" economies as such is not very extensive and/or sig-

nificant, then field B.1 should be dropped and the material covered thereby should be treated under (what is now) B.2 or B.3. Field B.3 is included under category B even though "national planning" and "free enterprise" are in some respects contradictory concepts; it is here included because the "free enterprise" system is one of the systems men have established to meet their economic needs, because the literature relating to the functioning of free enterprise economies as such illuminates some of the problems dealt with under B.1 and B.2, and because there must be place for literature relating to the actions and processes by which free enterprise economies are converted into "mixed" or "state" economies and vice versa. There is some unavoidable overlap at the theoretical level between B and A.1 and A.7, and at the practical level between B (especially B.3), C.2 and D; but effective administration of the scheme may hold this overlap to a minimum.

Category C is designed in general to deal with particular public aspects of predominantly free enterprise economies, and especially with the public aspects of the economy of the United States. While C.1 is designed to cover the literature of public finance and taxation as such, there will be considerable overlap between C.1 and A.5 inasmuch as the level of economic activity is significantly affected by tax and fiscal policies; the editor, therefore, must devise ways of minimizing this overlap. Field C.3 includes the varied and heterogeneous literature relating to what is called conventionally "social security." Field C.2 is contrived to cover all aspects (other than those treated under C.1, C.3, and D.3) of public operation and public regulation and control in predominantly free enterprise economies, particularly as they are practiced in or proposed for the American economy. Five subfields, C.2.a–C.2.e, have been established, and a sixth miscellaneous subfield C.2.f has been introduced to give elasticity to the whole field C.2. The editor will have to determine among other things whether C.2.a should be combined with C.2.b; whether C.2.d should be combined with D.2; and whether C.2.e should be replaced by a larger and more inclusive category, "Agricultural Economics."

Category D is intended to cover the literature of economics at the operational level, particularly as it relates to predominantly free enterprise economies. Most entrepreneurial activities may be grouped under three broad headings: Production, Distribution or Marketing, and Finance. Field D.1 now includes the literature on production, marketing, and price policies and practices; but should this literature prove too extensive, field D.1 may be divided into two fields, one having to do primarily with literature relating to production and the other with literature relating to marketing and pricing policies. Field D.2 covers the literature of banking and private (as distinguished from public) finance. Field D.3 is intended to include literature dealing with all aspects of labor relations, problems, legislation, and unionism. There will occasionally be overlaps between D, on the one hand, and C, A.1, A.5, and A.6, on the other, but these should not be serious. While most of the matter covered in D will have to do with predominantly free enterprise economies, the groupings are open and, whenever it is desirable, can accommodate literature having to do with operational practices in mixed and totalitarian economies.

Field E is designed to cover the seemingly heterogeneous but essentially homogeneous literature dealing with ***resource supplies*** and the circumstances affecting these supplies, with the various movements of population, and with the theory and the practice of the location (particularly within states) of economic activities and peoples. It may be that this field will have to be subdivided into two, one having to do primarily with all types of population movements and with their causes and their consequences and the other with matter relating to resource supplies and the theory and practice of locating economic activities.

Category F gives the scheme necessary elasticity, for it permits the treatment of types of literature not included in categories A to E. Accounting is a case in point. Accounting, statistics, and mathematics may be said to constitute the instruments of economics. No provision has been made for the treatment of relevant statistical and mathematical literature because the substantive findings developed through the use of these instruments will be incorporated in the critical summaries, while discussions of these instruments as such and their development belong in more specialized journals. Treatment of this sort will hardly suffice for accounting, however. For accounting is in many respects the grammar of business; and while it is sometimes based upon economic theories which economists consider questionable, it nonetheless exercises great influence upon price and other business policies and thus helps to shape the course of economic events. Accordingly, occasional treatment of the implications of accounting theory and practice for economic analysis is indicated, its frequency to be determined by the editor in the light of events. This treatment will be provided under F.

The 1939–46 review (presumably in two volumes) of developments in economics will include, besides critical assessments of the fields suggested in the above classification scheme or in some alternative scheme, two essays by the editor: (a) a short essay indicating the purposes of the review project; and (b) a longer essay delineating the main trends and developments in economics in 1939–46 as revealed in the articles composing the review volumes.

While the Committee is agreed that the review project should be continued after 1946 if the initial venture proves at all successful, it is not yet able to suggest how it should be continued. Experience with the initial volume should help resolve this question. It is agreed that it will not be possible or worth while to review any one subject more than once every three years. Triennial or less frequent treatment of subjects may be provided in one of three ways, however: (a) a review volume similar to that contemplated for 1939–46 may be brought out every three to five years; (b) a review volume may be published annually, but designed to include only between one-third and one-fifth of the branches of economics; (c) an orderly program of review articles may be arranged with the proviso that no subject be reviewed more than once every three to five years, and that when a competent review of this kind is completed it be published as a separate pamphlet (such as the collection of reviews of the TNEC reports) and distributed with the *American Economic Review*. The objection to method (a) is that contributors will not complete their assignments punctually and in the manner required by

such a triennial volume. The same objection may be made to method (b); but it is weakened if the editor is free to use only those contributions which conform to standards. The advantage of both method (a) and method (b) consists in the fact that it insures regularity and provides a book volume. The advantage of method (c) lies in the fact that although reviews will be forthcoming in accordance with a planned schedule, no review article will be published until it conforms to high editorial standards. In every case adequate remuneration will have to be provided for the contributors, and the cost of the project will have to be met.

III. *Editorial Staff; Contributors; Consultants*

What is said in this section and in the section that follows relates only to the preparation of a two-volume review of the developments in economics in the period 1939–46. Plans for subsequent reviews must be made in light of the Association's experience with this first project.

The editorial staff will consist of a managing editor and an associate editor, and of a board of advisory editors who will be appointed by the President upon the recommendation of the managing editor. The review articles will be prepared by selected contributors. Before final acceptance these articles will be submitted to designated consultants. The managing editor, the associate editor, and the contributors will be remunerated as provided for below; the consultants may be remunerated if the editor considers this advisable.

Managing Editor. It will be the duty of the managing editor to execute the two-volume review along the broad line suggested in this report. He will plan the work; select advisory editors and contributors and consultants; determine how the broad field of economics is to be subdivided and what is to be covered by each of the selected contributors; handle all editorial details; and push the project to a successful conclusion in accordance with a predetermined schedule. The editor will be free always to act in light of his best judgment, with the understanding, of course, that the Association expects him to produce a work of the very first order.

The Committee believes that this project calls for the very highest type of editorial leadership. The managing editor will have to enlist the participating personnel, organize and guide the project at all stages, and push it to a successful conclusion. Upon him in fact will rest full responsibility for the quality of the product and the success of the venture. The Committee is convinced, however, that if the economics profession co-operates in making contributions, the project can be carried through successfully.

The Committee believes, in view of the advice of those who have had extensive editorial experience and of its conception of the project under consideration, that executing this editorial job will command at least one-half of the managing editor's time in 1946 and in 1947. The work of course will be heaviest in the early months and later when the manuscripts begin to come in; but it will require the editor's attention at all times.

Associate Editor. The associate editor will assist the managing editor in whatever respects the managing editor requires assistance, planning, check-

ing, etc. As in the case of the managing editor, it is contemplated that the execution of the project will command at least one-half the associate editor's time in 1946 and 1947. The associate editor should be situated in the same institution as the managing editor, or in the immediate vicinity; for the successful and efficient execution of the project calls for close and continual co-operation on the part of the two editors.

Advisory Editors. The managing editor, upon accepting this post, should call upon the President to appoint at least five highly competent advisory editors who are determined to see the project through. Should he desire more than five advisory editors, he may call upon the President to make additional appointments. The advisory editors will not be remunerated, but their names will appear prominently in the completed work. The managing editor will be free at all times to consult with his advisory editors regarding all aspects of the project. The advisory editors will be eligible for the preparation of review articles.

Contributors. The managing editor will select to review each field scheduled for review a contributor who is both highly competent in the field in question and capable of writing lucidly and accurately for a highly intelligent but nonspecialist audience. The contributor must recognize that he is preparing not a new and pathbreaking contribution peculiarly his own but a critical summary and careful assessment of the literature of a field for fellow economists and other interested persons who are not specialists in the field in question. It will be incumbent upon the contributor to maintain the highest standards and to make reference only to the small number of works in the field covered which are worthy of reference. It is estimated that it will take a contributor six months of his spare time finally to complete his critical assessment. Contributors will receive honoraria. If a selected contributor desires another to work jointly with him, such arrangement may be permitted, and the honorarium may be split. While a fair honorarium is allowed a contributor, those who are invited to contribute should be governed also by the fact that the American Economic Association has an obligation to its public which this project is designed to fulfill, and that they should feel impelled to help the Association meet this obligation.

Consultants. The function of the consultant may best be illustrated by an example. Suppose Richard Roe prepares a critical summary in the field of public finance. This summary will be submitted, before final acceptance for publication, to two consultants, also specialists in the field of public finance. The consultant will examine the summary for balance, fairness, and adequacy of coverage, and will make suggestions if he believes them in order. If there is a fundamental difference in opinion, final decision will be made by the editor, with the proviso that if the editor so decides the difference in opinion may be noted in a footnote. The names of the consultants will be published in conjunction with the critical review. Because the consultants may be called upon frequently by the editor, it is suggested that $1,500 be allocated for their remuneration. They will be provided with (say) twenty reprints.

It has been suggested that more than two consultants be used on each

article. Final decision on this matter must be made by the editor. It should be kept in mind, however, that consultation of more than two or three consultants will raise very serious administrative and editorial problems. Those with experience in these matters advise that two consultants are sufficient.

The consultants will be selected by the editor from a list of persons highly competent in the field under review. The editor may consult with these and other experts in a field regarding any problems that come up. The contributor likewise may consult with the experts in his field preparatory to developing the critical summary and assessment of the literature of the field.

IV. *Business Aspects*

The composition, printing, distribution, etc., of the two-volume 1939–46 review will be carried out by such competent private publisher as the Association determines to enter into a contract with. This publisher will be expected to plan for the widespread distribution of the two-volume work to every potential group of purchasers. The publisher will also be expected to make his technical aid and advice available to the managing editor at all times. The Committee recommends that publication arrangements be entered into shortly after an editor is appointed.

Since the immediate objective of this project is the dissemination of economic knowledge, it is proposed that the set of two volumes be offered at about $6 net. At this rate sales should run at least 5,000, and they may run very much higher; for it is to be assumed that nearly all who take the *American Economic Review* (close to 6,000) and many others will purchase this work, if it is pushed hard and has the endorsement of the Association.

It will cost between $42,000 and $51,000 to carry out this project. Composition, printing, binding, and related expenses will run in the neighborhood of $15,000. Contributors will number between twenty and thirty, depending upon how the field of economics is finally subdivided for treatment. It is recommended that the contributor's honorarium be not less than $500 inasmuch as he may want to hire an assistant to help him check the literature. We may therefore put the contributor cost at between $10,000 and $15,000. It is recommended also that $1,500 be set aside for the remuneration of consultants should the editor consider their remuneration to be advisable. The editor will have to go on half time at his institution for two years and give the remainder of his time to this project. For managing editor, therefore, $8,000 to $10,000 must be allowed. A corresponding demand will be made upon the time of the associate editor. For him $4,000 to $6,000 must be allowed. There should also be placed at the disposal of the editor and the associate editor an allowance of at least $3,500 for secretarial help, supplies, etc., with the proviso that such amount as is not needed be restored to or remain with the guarantors. The actual amount that will have to be paid to the editor will depend upon his annual salary and his willingness to undertake this project. On the basis of these cost estimates the project will cost between $42,000 and $51,000.

Because it is almost certain that this project will cost more than will be restored through sales, it will have to be subsidized, the subsidy itself being

justified on the ground of the great and pathbreaking contribution to economic education which this project will make.

With respect to subsidy, the Committee recommends as follows: (1) Let the American Economic Association raise its guarantee of the project to $10,000 on condition (2) that a foundation guarantees the project to the extent of $25,000. In event that sales run in excess of the publisher's stipulated commitment, let that part of the excess which, under the contract with the publisher, accrues to the Association be divided pro rata with the guaranteeing foundation. For example, suppose the excess accruing to the Association amounts to $17,500. This is one-half the combined guarantee of the Association and the foundation; $5,000 will be the Association's share, and $12,500 the foundation's share.

The details of the contract with the commercial publisher lie outside the purview of this report. It is the belief of the Committee, however, that a satisfactory arrangement can be made with a commercial publisher inasmuch as considerable prestige will attach to the publication of the two-volume work under consideration. It is also the belief of the Committee that if the project is well executed, and if the sale of the work is pushed hard, the Association and the foundation will be able to recover a considerable part of their guarantees. It is apparent, however, that without a very heavy initial guarantee on part of a foundation interested in supporting a genuinely pathbreaking project, it cannot be undertaken.

Respectfully submitted,

E. M. Burns
C. D. Edwards[1]
W. B. Stewart
A. J. Wickens
J. J. Spengler, *Chairman*

[1] C. D. Edwards has not seen the final revision of report. The Chairman has included his name among those approving the report inasmuch as he approved the earlier versions which, however, greatly underestimated the financial outlay required.

PROGRESS REPORT ON SOURCE BOOK OF ECONOMIC STATISTICS

The original proposal for preparation of a Source Book of Economic Statistics is described in a memorandum from J. Frederic Dewhurst dated April 12, 1945. This proposal was circulated informally to a number of interested persons and elicited a generally favorable response.

Proposals to the Two Associations

The proposal was then submitted to the Executive Committee of the American Economic Association with the suggestion that a joint committee be set up by the Economic Association and the American Statistical Association "to explore the merits and feasibility of the project." The Executive Committee of the A.E.A. acted favorably upon the suggestion at it April, 1945, meeting and authorized the President, I. L. Sharfman, to name three members of such a committee if the Statistical Association should take similar action. The proposal was then submitted (May, 1945) to the Board of Directors of the Statistical Association, who authorized the President, Walter A. Shewhart, to appoint three members of the joint committee.

The proposal for preparation of the Source Book and the action authorized by the two Associations with respect thereto were discussed at the September 28, 1945, meeting of the Problems and Policy Committee of the Social Science Research Council. There was considerable interest in the project and one member of the Committee suggested the possibility that the Bureau of the Census might be able to handle the preparation of such a Source Book as a Census publication. The Problems and Policy Committee thereupon authorized the Executive Director of the Council to write to the Secretary of Commerce transmitting a Committee resolution urging favorable consideration of the proposal. The letter of August 9, 1945, from the Executive Director of S.S.R.C., Robert T. Crane, and the reply of August 23, 1945 from the Secretary of Commerce indicate that the Census Bureau was prepared to "co-operate to the fullest extent possible . . . and is including in its budget request for next year (1946–47 fiscal year) the necessary funds for compilation and printing."

Members of Joint Committee

By the end of September, 1945, the Joint Committee of the two Associations had been constituted. The three members from the American Economic Association are Morris Copeland (Chairman), Amos E. Taylor, and Stacy May; members from the American Statistical Association are Walter Mitchell (Chairman—with J. Frederic Dewhurst as alternate), Philip Hauser, and Theodore Yntema. The Economic History Association had also expressed an interest in the proposal and was urged to designate three representatives who could be invited by the Joint Committee to sit in at its meetings. These representatives are Shepard B. Clough, W. B. Smith, and Harold Williamson.

Meeting of Joint Committee

The Joint Committee held its first meeting at 10:00 A.M. on Saturday, November 3, at the offices of the Social Science Research Council in New York under the chairmanship of J. Frederic Dewhurst. All members were present with the exception of Walter Mitchell, who was absent from this country, and Philip Hauser, who was detained in Washington and who sent Ross Eckler of the Bureau of the Census to represent him. Shepard Clough and W. B. Smith, representing the Economic History Association, were also present.

The Chairman briefly described the original proposal and reported on developments since the two Associations had agreed to appoint a Joint Committee to consider the merits and feasibility of the proposal.

Mr. Eckler then reported at some length on the attitude of the Census Bureau toward the proposal. He said that the Bureau regarded the Source Book as a desirable companion volume to the *Statistical Abstract* (though it would of course be published at much longer intervals) and that the Bureau was requesting an appropriation for the 1946–47 fiscal year to finance its preparation and publication. In the meantime the Bureau would commence exploratory and planning work with a view to reporting back to the Joint Committee at a meeting in February or March, 1946, at which time it would probably be known whether Congress had acted favorably on the request for funds.

There was then a general discussion of the merits and feasibility of the proposal and as to the possible scope and coverage of the Source Book. The general opinion was that the proposal would be entirely feasible if the Census received the funds to finance the project, but that otherwise it would require a substantial grant from a foundation or some other source. The Committee believed that the volume would be valuable primarily as a teaching aid and as a convenient reference volume but would have only secondary value in intensive and specialized research.

The Committee made three principal recommendations, as follows:

1. That the explanatory text should be somewhat fuller than in the illustrative exhibit presented, so as to give in addition to sources and technical specifications a discussion of (a) the significance of each series and historical changes therein, (b) the limitations of the series as an economic measurement, (c) the relationships between series (e.g., between federal gross debt and budget deficit).

2. That the selection of series for inclusion should be made with a view to providing those measurements of greatest economic-historical significance, even if this involved some special processing by the Census (e.g., splicing, deflation, productivity ratios) and even if this meant including series with substantial imperfections.

3. That these two objectives should be given primary emphasis rather than the number of series to be included. (The Committee inclined toward a considerably smaller number of series for the first edition than that proposed in the original memorandum.)

The Committee discussed various other problems such as the necessity

of providing for an editor at a sufficiently high professional level (P-8 if that proved necessary to obtain the right person), the need to provide for obtaining the assistance of specialists on the various series, the desirability of including important "private" as well as "official" series, the possibility of including certain quarterly and monthly series in addition to those available only on an annual basis, and the desirability of asking the originating agencies to refine and improve certain series for inclusion in the volume.

It was agreed that the Census should keep the above considerations in mind in its preliminary exploratory work and that the Joint Committee would discuss these questions further at its next meeting.

The Committee adjourned at 2:00 P.M. with the understanding that it would meet again in February or March, 1946, at which time the Census would probably be prepared to present the results of its preliminary work.

Respectfully submitted,

MORRIS A. COPELAND

REPORT OF THE COMMITTEE ON THE UNDERGRADUATE TEACHING OF ECONOMICS AND THE TRAINING OF ECONOMISTS

Our first report to you, submitted in December, 1944, announced the program of this Committee through a statement of general objectives and plans. The work to be done had been divided among several subcommittees and a procedure for the preparation and publication of reports had been drawn up. Our second report, submitted in April, 1945, announced the approximate completion of the organizational phase of our work and the beginning of the exploratory phase. Our present report records some of the work that has been done, presents some tentative statements with regard to the aims of our program, and requests authorization for some steps beyond those that you already have approved.

Activities of the Subcommittees. For the last eight or nine months our principal concern has been with the developing programs of our ten subcommittees and, in a few cases, with changes in their organization and membership. (A roster of members of the committee, the subcommittees, and the panel of consultants is appended to this report.) It is with much satisfaction that we report that the subcommittees have, without exception, shown keen interest in the work in which they are engaged. At this point, however, there is some unevenness in the actual accomplishments of the several groups; some of the subcommittees have carried their work much farther than have others. In view of the differences in the work to be done, and also of the varying demands on the time and energies of members due to their other responsibilities, the existing degree of unevenness appears no greater than might have been expected. Each of the subcommittees has engaged in discussion and consultation both among its own members and with this Committee. Members of our panel of consultants have been of assistance to the Committee and to some of the subcommittees, although this facility has not been employed as much in the past as it probably will be in the future. Most of the consultation and discussion of issues has, of necessity, been carried on by correspondence, although there have been some meetings of two or more members of the various groups for purposes of our work.

Four of our subcommittees (those to report on the Study of Economics in Schools of Business, Undergraduate Economics in Preparation for Careers in Public Service and in Business Administration, the Study of Economics in Relation to Education in Agriculture, and the Study of Economics in Relation to Education in the Professions) are at work on specialized studies of the occupational value of the study of economics. Each of these groups has designed a procedure that seems appropriate to its own ends. That adopted by the subcommittee on the Study of Economics in Relation to Education in the Professions is a necessarily novel one. The chairman of this group, Mr. Palmer, has associated with him a teacher from each of the fields of engineering, law, medicine, and social service. Each of these members was selected because of his keen interest in the significance of economics to his profession, and each has prepared, or will prepare, a report link-

ing the study of economics to his own field. Some of these members have formed sub-subcommittees among their own colleagues.

The programs of those subcommittees that are to report on more general phases of our subject can be set forth in greater detail. Such comments as are made here on the work of these several groups are offered without prejudice to their respective final emphases and judgments.

The three subcommittees, whose topics have widest scope (those reporting on Elementary Courses in Economics, Interdepartmental Courses in the Social Sciences, and The Undergraduate Economics Curriculum and Related Areas of Study) have developed questionnaires designed to bring to light the existing practices in American colleges and universities and also the opinions of teachers with regard to these several subjects. The questionnaires were sent in December as a single mailing to the economics departments of 160 selected institutions. The sample includes large, medium-sized, small, public, denominational and nondenominational colleges and universities in all parts of the United States. The returns are coming steadily and amount at this time to about 30 per cent of the number sent.

The subcommittee on the Treatment of Especially Able Students of Economics has designed a particularly interesting procedure. In addition to studying methods used to discover gifted students and to provide appropriate opportunities for them, this group has formed contact with a number of teachers actually engaged in this work and with a much larger number of former students of these teachers.

The original chairman of the subcommittee on the Training of Teachers of Economics, Mr. Marshall, was, to our deep regret, compelled by the pressure of other work to resign the chairmanship of this group and Mr. Tolles has assumed the chairmanship. The interest and importance of the work of this subcommittee are enhanced at this time by the contradictory educational trends that appear to be developing more and more as between our graduate schools and our colleges. Much graduate teaching of economics, upon which we must rely for the training of undergraduate teachers, is moved by increasing technical requirements in research in the direction of more intensive specialization. There is occurring at the same time a strong and widespread movement on the part of the colleges to broaden the study of the social sciences and to do this by removing some of the jurisdictional frontiers which, in the past, have separated economics, political science, sociology, and wide areas of history, philosophy, and anthropology. The trend toward specialization that has made of the "general economist" a *rara avis in terris* will make an even rarer subspecies of the economist who can qualify as a "general social scientist."

The subcommittee on the Teaching of Economics in the Schools has conducted a vigorous inquiry and now makes a proposal which, if it is to be given effect, requires special authorization from you. At a conference of several members of this group in New York in October it was decided that an appropriate study of the area assigned to it could not be made on the ground of economics alone, but that such a study would need to be coextensive with the entire range of social studies pursued in secondary and elementary schools. Following this decision a liaison conference was held in

Washington between Mr. Patterson, chairman of the subcommittee, Mr. Hartshorn, Executive Secretary of the National Council for the Social Studies, and the chairman of this Committee. It was agreed among them that a study of the teaching of social studies in the schools should be sponsored and aided by our Association, the American Political Science Association, the American Historical Association, and the American Sociological Society, or by some combination of these bodies, and that the work should be done by a special staff of the National Council. As a move toward this end it is proposed that our Association and those of the political scientists and sociologists should be represented officially on the directorate of the National Council for the Social Studies (a department of the National Education Association) as the American Historical Association now is. The Board of Directors of the National Council for the Social Studies has approved this suggestion in principle and has appointed a committee to meet with your committee or with such other representatives of our Association as you may designate.

Aims of the Study. At the risk of laboring the obvious, we offer the opinion that a study of the teaching of economics cannot proceed to such a limited "examination of relationships" and "discovery of uniformities" with such methodological finesse as may apply to a project in economic research. In spite of the current loose application of "fact finding" to problems for which no relevant data exist with a view to composing unresolvable differences, we are acutely conscious of the limited value of the facts we are finding. We have circulated a considerable volume of questionnaires with full understanding that a description of current practices in the teaching of economics will not, in itself, yield the result at which we aim. This aim is to stimulate and assist improvement in the teaching of economics.

We cannot, as a committee, devise a standard means to this end. It is appropriate—and it is a source of our greatest power—that the individualism heralded by the classical economists operates so strongly today among teachers of economics. There are those partizans of descriptive detail who hold at least tacitly to the view that ideas are gained from experience, and also their doctrinnaire opponents who believe with Santayana that "the great problem of education is how to get experience out of ideas."

Efforts at educational reform, widespread at present among our colleges, are seeking curricular devices that will establish broader bases for generalization. These efforts are confronted both with the increasing specialization of graduate study in economics that is mentioned above and with a large volume of new problems and of unassimilated facts and ideas in the general area treated by economics. While we know that conditions of this kind always have existed, and at times in degrees comparable to those of our time, the mere knowledge that this is so gives us no absolution for our sins. At this distance we can see that the new problems and the unassimilated facts and ideas in England at the end of the Napoleonic wars provided the incentive and the materials for Ricardian liberal economics. This prototype holds out some promise of both pleasure and pain, but the challenge it presents is not one to be dealt with by a committee.

Improved teaching of economics must occur in each college by virtue of

self-criticism and effort by the department of economics in that college. Mr. Wolfe, in his paper to be presented to our round table Sunday afternoon, says that "the main task of our committee is essentially job analysis," and raises the questions: "Why do we teach economics at all? What should be our aims in the teaching of economics? What content, in the elementary course and in the specialized courses respectively, is most suitable to these aims? What function in the educational process does the teaching of economics perform which cannot equally well or better be performed by some other subject?" If our Committee's work can assist teachers of undergraduate economics in American colleges and universities to carry out their respective job analyses, we believe that it will have justified the trouble and expense that it has caused.

In preparing our reports, we expect to follow the procedure outlined in our supplementary report of February 2, 1945. We intend to complete and publish these reports during the current year.

Requests for Authorization. We respectfully recommend:

1. That the Executive Committee act on our suggestion that the American Economic Association, in collaboration with one or more of the other national associations in the social sciences, sponsor a study of education in the social studies in the schools, the work to be done and the expense borne by the National Council for the Social Studies, a department of the National Education Association. If the suggestion is approved it will be necessary that this Committee, or some other body, be authorized to make arrangements and plans with representatives of the Council.

2. That we be authorized to prepare a supplement to the *American Economic Review* in which our several reports on the undergraduate teaching of economics will be published.

3. That we be authorized to spend for our further work an amount up to $1,000 in addition to the unexpended balance of the $1,000 appropriated at your meeting of January 30, 1945. Although some of our bills are not yet in, our costs to this time probably have not exceeded $400. In addition to costs due to the preparation of manuscripts, it is expected that a small number of conferences among members may entail some expenses prior to, and in connection with, the preparation of our reports.

Submitted for the Committee,

HORACE TAYLOR, *Chairman*

COMMITTEE ON THE UNDERGRADUATE TEACHING OF ECONOMICS AND THE TRAINING OF ECONOMISTS

Roster of Members, January, 1946

Addresses of members not now in residence at their institutions are given in parentheses.

The Committee

Horace Taylor, Columbia University, Chairman
Paul M. O'Leary, Cornell University
Joseph J. Spengler, Duke University

W. Blair Stewart, Reed College
Albert B. Wolfe, Ohio State University

The Subcommittees

1. Elementary Courses in Economics
   Edward E. Hale, University of Texas, Chairman
   Mary Jean Bowman, Iowa State University (807 S. Limestone St., Lexington, Ky.)
   William W. Hewett, University of Cincinnati
   Bruce M. Knight, Dartmouth College
   Shorey Peterson, University of Michigan
2. Interdepartmental Introductory Courses in Social Sciences
   Louis M. Hacker, Columbia University, Chairman
   Morris E. Garnsey, University of Colorado
   Melvin M. Knight, University of California
   Maynard C. Krueger, University of Chicago
   Robert D. Patton, Ohio State University
3. The Undergraduate Economics Curriculum and Related Areas of Study[1]
   Mabel Newcomer, Vassar College, Chairman
   Kenneth E. Boulding, Iowa State College
   Alzada Comstock, Mt. Holyoke College
   Overton H. Taylor, Harvard University
4. The Training of Teachers of Economics
   Arnold Tolles, American University, Chairman
   William L. Crum, Harvard University
   Ralph L. Dewey, Office of Marketing Services, War Food Administration, Washington 25, D. C.
   Leon C. Marshall, American University
   Harold Rowe, Brookings Institution
   George J. Stigler, University of Minnesota
5. The Study of Economics in Schools of Business
   Robert D. Calkins, Columbia University, Chairman
   Elmer J. Brown, University of Arizona
   Edward T. Grether, University of California
   Richard Meriam, Harvard University
   Leonard L. Watkins, University of Michigan
   John B. Woosley, University of North Carolina
6. Undergraduate Economics in Preparation for Careers in Public Service and in Business Administration
   Ben W. Lewis, Oberlin College, Chairman
   Carroll L. Christenson, University of Indiana
   Joel Dean, Columbia University
   Robert A. Gordon, University of California
   William H. Stead, Vanderbilt University
   Amos E. Taylor, Bureau of Foreign and Domestic Commerce

[1] Lorne T. Morgan, University of Toronto, has been forced by ill health to resign from this subcommittee. Another member will be appointed to fill this vacancy.

7. Treatment of Especially Able Students of Economics
   Amy Hewes, Mt. Holyoke, Chairman
   Corwin D. Edwards, Northwestern University
   Elmer D. Fagan, Stanford University
   Ralph Hon, Southwestern College, Memphis (4418 Chestnut St., Philadelphia 4, Pa.)
   James G. Smith, Princeton University
8. The Teaching of Economics in the Schools[2]
   S. Howard Patterson, University of Pennsylvania, Chairman
   Harold F. Clark, Teachers College, Columbia
   Walter O'Donnell, Ohio State University
   Omar Pancoast, Jr., Haverford College (530 No. Thomas St., Arlington, Va.)
9. The Study of Economics in Relation to Education in Agriculture
   Warren Waite, University of Minnesota, Chairman (Address: University Farm, St. Paul 8)
   Murray R. Benedict, University of California
   F. F. Hill, Cornell University
   Hugh B. Price, University of Kentucky
   Theodore W. Schultz, University of Chicago
10. The Study of Economics in Relation to Education in the Professions
    William B. Palmer, University of Michigan, Chairman
    Frederick A. Bradford, Lehigh University
    Franz Goldman, School of Medicine, Yale University
    Eugene V. Rostow, School of Law, Yale University
    Helen Russell Wright, School of Social Service Administration, University of Chicago

The Panel of Consultants

John D. Black, Harvard University
Ralph H. Blodgett, University of Illinois
Harry G. Brown, University of Missouri
Raymond T. Bye, University of Pennsylvania
George J. Cady, Northwestern University
John Maurice Clark, Columbia University
Morris A. Copeland, War Production Board
Ira B. Cross, University of California
Herbert F. Fraser, Swarthmore College
Frederic B. Garver, University of Minnesota
Frank D. Graham, Princeton University
Ernest H. Hahne, Northwestern University
Stanley E. Howard, Princeton University
John Ise, University of Kansas
William H. Kiekhofer, University of Wisconsin
Simeon E. Leland, University of Chicago

[2] The membership of this subcommittee has been reduced by necessary resignations. One or more additional members will be appointed.

Harlan L. McCracken, Louisiana State University
Ernest M. Patterson, University of Pennsylvania
Gustav T. Schwenning, U. S. Office of Education (Federal Security Agency, Washington, 25)
Jacob Viner, University of Chicago
Ray B. Westerfield, Yale University
Dale Yoder, University of Minnesota

REPORT OF OUR REPRESENTATIVE ON THE SOCIAL SCIENCE RESEARCH COUNCIL

In the absence of Dr. Simeon E. Leland I am submitting a brief report on behalf of the representatives of our Association on the Social Science Research Council. Much of the spring meeting had to do with personnel and operational aspects of the Social Science Research Council. Both at this meeting and at the September meeting attention was given to the development of interdiscipline approaches to problems and to some of the activities discussed in the report of the research committee which is being presented, in the absence of its chairman, by Dr. Donald H. Wallace.

Most important of the subjects taken up at the September meeting was the relation of the federal government to research. This matter is of grave importance because of the bills which have been introduced in Congress to provide increased federal support for research. The Council endorsed the principles relating to research set forth in the President's message of September 6, 1945, to the Congress, and voted unanimously to offer its aid toward the accomplishment of this program.

(An analytical summary of the testimony presented in the hearings on science legislation may be found in Subcommittee Monograph No. 5, which is Appendix to Report from the Subcommittee on War Mobilization to the Committee on Military Affairs United States Senate pursuant to S. Res. 107 [78th Congress] and S. Res. 146 [79th Congress] authorizing a study of the possibilities of better mobilizing the national resources of the United States [December, 1945]. Subcommittee Report No. 7, made pursuant to the same resolutions [December 21, 1945] includes the text of Bill S.1720 providing for the establishment of a National Science Foundation, together with an analysis of the separate sections of this bill.)

(One of our principal concerns as economists, I take it, is to secure adequate support for social science and at the same time preserve freedom of inquiry. Following the September S.S.R.C. meeting the passage of a National Science Foundation Bill was jeopardized by controversy among scientists. S.1720 meets most of the objections to earlier drafts and is supported by the Independent Citizens' Committee of the Arts, Sciences, and Professions, Inc.)

A second matter considered at the September meeting was the popularization of the findings of social science. The Council endorsed the view that communication with the public be improved. Implementation is being studied. In light of the discussion of this matter it may be in order for those in charge of the publications of this Association to give independent consideration to this matter.

Respectfully submitted,

JOSEPH J. SPENGLER

REPORT OF OUR REPRESENTATIVE ON THE BOARD OF THE NATIONAL BUREAU OF ECONOMIC RESEARCH

The year 1945 was the twenty-fifth anniversary of the National Bureau of Economic Research.[1] To signalize this the National Bureau has planned a two-part program. One part will be a series of seven reports reviewing major undertakings of the National Bureau: *What Happens during Business Cycles—A Progress Report*, by Wesley C. Mitchell; *National Income: A Summary of Findings*, by Simon Kuznets; *Patterns of Monetary Outlay and the Interaction of Prices and Quantities in Business Cycles*, by Frederick C. Mills; *Construction Work and Business Cycles*, by Arthur F. Burns; *Wages and Employment in Business Cycles*, by Leo Wolman; *Trends in Output and Employment in American Industry, 1900–40*, by George J. Stigler; and *Finance and Credit in American Economy, 1900–44*, by Ralph A. Young.

The second part of the anniversary program will be a series of meetings in June, 1946, devoted to the general topic, "Economic Research in Relation to the Development of Economic Science and Public Policy." Guests from public and private agencies in the United States and from abroad will present papers on this subject and participate in the discussion.

In 1944 the Board of Directors appointed a Committee on Future Policy to review with the staff the past work, the studies in progress, desirable extensions, and the general nature and direction of the future work of the National Bureau.

The Committee's recommendations are that the National Bureau continue to concentrate attention upon basic problems rather than upon questions of the day, to seek understanding of what happens in the actual world, to measure economic factors, so far as possible, to test explanatory hypotheses for conformity to fact, to co-operate closely with like-minded individuals and agencies, to publish evidence on which conclusions rest and point out the margins of uncertainty surrounding them, not to give advice on policies or to pass moral judgments—in short, to keep its work and its reports as scientific in method and spirit as it can.

Basic investigations in each of the areas included in the National Bureau's program were advanced rapidly during the year and several that had been in preparation for a number of years were completed. Wesley C. Mitchell and Arthur F. Burns completed and sent to press *Measuring Business Cycles*. Simon Kuznets published *National Product in Wartime* and completed his estimates of national income and capital formation back to 1869. Research in production and productivity which had previously dealt with manufacturing and certain nonmanufacturing industries was extended by Solomon Fabricant and George J. Stigler to the service industries. Under the direction of Morris A. Copeland a study of the flow of money

[1] The *Annual Report* for 1945 was given to a discussion of "The National Bureau's First Quarter-Century," by Wesley C. Mitchell. Copies are available on request to the National Bureau of Economic Research, 1819 Broadway, New York 23, N. Y.

payments was added to the program and work was started in May. The objective of this investigation is to improve the understanding of the workings of our economic system by measuring the flow of payments and comparing its fluctuations with those of goods. The program of research in finance was broadened to include investigations in agricultural finance and urban real estate finance.

Wesley C. Mitchell resigned as Director of Research, effective October 10, 1945, and was succeeded by Arthur F. Burns. Dr. Mitchell continues as a member of the research staff.

Respectfully submitted,
DONALD H. WALLACE

REPORT OF OUR REPRESENTATIVE ON THE AMERICAN COUNCIL OF LEARNED SOCIETIES

The annual meeting of the A.C.L.S. was held at Rye, New York, January 23–25, 1946. The Association was represented by F. H. Knight. The conflict of convention dates prevented J. A. Schumpeter from attending the Council meetings, and J. W. Bell from attending the Conference of Secretaries which customarily holds concurrent meetings with the Council.

Apart from routine business a number of items of considerable interest were discussed.

A set of regulations was adopted for the Conference of Secretaries in view of the status accorded it in 1945 as an integral part of the A.C.L.S.

A proposal for a common secretariat to conduct some of the routine work of the constituent societies was put forward and discussed and referred back for further elaboration.

The question of selection of delegates (and alternates) to the A.C.L.S. by the constituent societies and recommendations which had been adopted some years ago (1934) were again brought to the attention of the secretaries. It was again recommended that the secretary of each society be given the status of permanent alternate so that he could always represent his society if no other delegate or alternate were present.

Closer co-operation between the Council and constituent societies was envisaged, especially in planning new developments.

The importance of teaching in the fields cultivated respectively by the societies was discussed and arrangements were made for an exchange of information on this point.

Finally, the problem of public relations of these societies was discussed with benefit.

A project for a history of the experience of the humanities and the social sciences during the war, to be prepared in the executive offices of the A.C.L.S., was laid before the Conference.

Postwar activities and problems of the Council received extended attention. These included, among other things, the development of the A.C.L.S. fellowship system, including "demobilization" fellowships, the future of "area" studies such as had been undertaken so extensively during the war, linguistic research and teaching, American studies, educational problems, federal aid to research and personnel training, and international intellectual relations.

After a somewhat lively debate it was agreed that the humanities and social sciences should make an effort to obtain their proper share of any federal aid to research and personnel training. At the same time it was recognized that such aid holds potential dangers, particularly in the fields of the social sciences.

The Director of the Council gave a clear and impressive report of the drafting of the UNESCO Constitution in London, in which he had taken a leading part, and of the development of cultural relations activities in the Department of State, with which also the Council has been associated

through him. The future of international intellectual life was discussed, and the possible participation of the A.C.L.S. therein, including the resumption of activity by the International Union of Academies.

The most important recent matter relating to the A.C.L.S. is the vote of the Executive Committee at its meeting on April 1 to request the Advisory Board to make a complete study, with recommendations, of the composition, organization, operation, and functions of the Council. The Board is starting on this study.

The plan for a history of the sciences in the United States, their influence upon social and cultural developments, etc., has been considered by the Conference Board of Associated Research Councils, and a special committee consisting of scientists, social scientists, and historians is being appointed to consider them further.

Respectfully submitted,
FRANK H. KNIGHT

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** Supplement.—Thirty-second Annual Meeting:
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Supplement No. 2.—Taxation of Excess Profits in Great Britain. Pp. 244. 2.50

Volume XI, 1921

The American Economic Review, March, June, September, and December; each, 1.25

Supplement.—Thirty-third Annual Meeting:
Papers and Proceedings. The Railroad Situation; Our Foreign Trade Balance; Problems of the Bituminous Coal Industry; Traditional Economic Theory; Non-Euclidean Economics; Federal Taxation of Profits and Income; Teaching of Elementary Economics. Pp. 194. 1.25

Supplement No. 2.—Karelsen Prize Essays, on What Can a Man Afford? Pp. 118. 1.00

Volume XII, 1922

The American Economic Review, March, June, September, and December; each, 1.25

Supplement.—Thirty-fourth Annual Meeting:
Papers and Proceedings. Business Cycles; American Trade Unionism; The Railroads; Workmen's Compensation; Federation in Central America; Teaching of Elementary Economics; The Chain Store Grocer; Economics and Ethics. Pp. 194. 1.25

Supplement No. 2.—Handbook of the Association, 1922. 1.50

Volume XIII, 1923

The American Economic Review, March, ** June, September, and December; each, 1.25

Supplement.—Thirty-fifth Annual Meeting:
Papers and Proceedings. Trend of Prices; Trend of Rate of Interest and Investment; Outlook for Wages and Employment; Overhead Costs; Commercial Rent and Profits; Labor Turnover; Factors in Wage Determinations; Income of Farmers; Large-Scale Production and Merchandising; Marketing Farm Products; Bureaus of Business Research. Pp. 293. 1.25

Volume XIV, 1924

The American Economic Review, **March,** June, September, and December; each, 1.25

Supplement.—Thirty-sixth Annual Meeting:
Papers and Proceedings. International Trade and Commercial Policy; Railroad Consolidation; Economic Theory; Transportation; American Foreign Trade; Marketing. Pp. 192. 1.25

Supplement No. 2.—Handbook of the Association, 1924. 1.50

Volume XV, 1925

The American Economic Review, March, June, September, and December; each, 1.25

Supplement.—Thirty-seventh Annual Meeting:
Papers and Proceedings. The Economics of Advertising; Problems of Economic Theory; Transportation; Marketing; Giant Power; The Teaching of Business and Economics; Business Administration; Monetary Stabilization; Foreign Service Training; Highway Economics; Psychological Problems of Industry. Pp. 165. 1.25

**Supplement No. 2.—Babson Prize Essay, on Forecasting the Price of Hogs. Pp. 22. 1.00

Volume XVI, 1926

The American Economic Review, March, June, September, and December; each, 1.25

Supplement.—Thirty-eighth Annual Meeting:

Papers and Proceedings. Movement of Real Wages; Teaching of Economics; Consuming Power of Labor and Business Fluctuations; Economic Problems Involved in the Payment of International Debts; Economics and Geography; Agriculture in Our National Policy; Tariff Making; Trade Associations; Theory of Wages; Reducing the Costs of Marketing; Topics in Economic History; Railway Problems; Land Economics; Federal Reserve Policies. Pp. 353. $1.25

Supplement No. 2.—Handbook of the Association, 1926. 1.50

Volume XVII, 1927

The American Economic Review, March, June, September, and December; each, 1.25

** Supplement.—Thirty-ninth Annual Meeting:

Papers and Proceedings. Economics of Prohibition; Economic History; Use of the Quantitative Method in the Study of Economic Theory; Present-Day Corporation Problems; American Practices Analogous to Foreign Controls over Raw Materials; Marketing; Interest Theory and Price Movements; Problem of Effective Public Utility Regulation; Immigration Restriction—Economic Results and Prospects; Family Budgets; Motor Transportation in the United States. Pp. 218. 1.25

Supplement No. 2.—Report of the Dinner in Honor of Professor John Bates Clark. Pp. 18. .50

Volume XVIII, 1928

The American Economic Review, March, June, September, and December; each, 1.25

Supplement.—Fortieth Annual Meeting:

Papers and Proceedings. Land Economics; Marketing; Present Status and Future Prospects of Quantitative Economics; Post-War Fluctuations of Commodity Prices; Relationship between Departments of Economics and Collegiate Schools of Business; Economic History; Simplification of the Federal Income Tax; Economic Significance of the Increased Efficiency of American Industry; An Approach to the Law of Production and Its Relation to the Welfare of the Wage-Earner; Meaning of Valuation; Railroad Valuation with Special Reference to the O'Fallon Decision; Interest Rates as Factors in the Business Cycle; Should the Debt Settlements Be Revised; An Examination of the Reasons for Revision of the Debt Settlements. Pp. 305. 1.25

Supplement No. 2.—Handbook of the Association, 1928. 2.00

Volume XIX, 1929

The American Economic Review, March, June, September, and December; each, 1.25

Supplement.—Forty-first Annual Meeting:

Papers and Proceedings. Market Shifts, Price Movements, and Employment; Some Observations on Unemployment Insurance; Marketing; Land Economics; Law and Economics; Price Stabilization; London and the Trade Cycle; Federal Reserve Policy and Brokers' Loans; Central Planning of Production in Soviet Russia; International Differences in the Labor Movement; Tariff Making in the United States; Economic History; Locality Distribution of Industries; Regulation of Electric Light and Power Utilities; An Inductive Study of Publicly Owned and Operated vs. Privately Owned but Regulated Public Utilities; Regulation of the Common Carrier; Commercial Motor Vehicle and the Public. Pp. 284. 1.25

Volume XX, 1930

The American Economic Review, March, June, September, and December; each, 1.25

Supplement.—Forty-second Annual Meeting:

Papers and Proceedings. Economic History; Public Works Plan and Unemployment; Theory of Economic Dynamics as Related to Industrial Instability; Chief Economic Problems of Mexico; Reparations Settlement and the International Flow of Capital; Federal Reserve Board—Its Problems and Policy; Economic and Social Consequences of Mechanization in Agriculture and Industry. Pp. 214. 1.25

Volume XXI, 1931

The American Economic Review, March, June, September, and December; each, 1.25

Supplement.—Forty-third Annual Meeting:

Papers and Proceedings. Decline of Laissez Faire; Small Loan Business; Social and Economic Aspects of Chain Stores; Russian Economic Situation; Trustification and Economic Theory; Persistence of the Merger Movement; Program of the Federal Farm Board; Social Implications of Restriction of Agricultural Output; Land Economics and Real Estate; Institutionalism—What It Is and What It Hopes to Become; An Approach to World Economics; International Industrial Relations—Migration of Enterprise and Policies Affecting It; World-Wide Depression of 1930; Present Depression—A Tentative Diagnosis; Power and Propaganda; Failure of Electric Light and Power Regulation and Some Proposed Remedies. Pp. 302. $1.25

Supplement No. 2.—Handbook of the Association, 1931. 2.00

Volume XXII, 1932

The American Economic Review, March, June, September, and December; each, 1.25

Supplement.—Forty-fourth Annual Meeting:

Papers and Proceedings. Private Enterprise in Economic History; Shorter Working Time and Unemployment; Quantitative Economics; Theory of Technological Progress and the Dislocation of Employment; Measurement of Productivity Changes and the Displacement of Labor; Stabilization of Business and Employment; Principle of Planning and the Institution of Laissez Faire; Institutional Economics; Elasticity of Demand as a Useful Marketing Concept; Investments of Life Insurance Companies; Real Estate in the Business Cycle; Investments and National Policy of the United States in Latin America; Recent Changes in the Character of Bank Liabilities and the Problem of Bank Reserves; Bank Failures in the United States; Transportation by Rail and Otherwise; Our Changing Transportation System. Pp. 306. 1.25

Volume XXIII, 1933

The American Economic Review, March, June, September, and December; each, 1.25

Supplement.—Forty-fifth Annual Meeting:

Papers and Proceedings. Rise of Monopoly in the United States; Record of Insurance in the Depression; Some Theoretical Aspects of Unemployment Reserves; The Economics of Unemployment Relief; American Economic Thought; Formation of Capital: Measurement and Relation to Economic Instability; Size of Business Unit as a Factor in Efficiency of Marketing; Reserve Bank Policy and Economic Planning; Federal Reserve Policy in World Monetary Chaos; Tariff Reform: The Case for Bargaining; Speculation in Suburban Lands; Real Estate Speculation and the Depression. Pp. 206. 1.25

Supplement No. 2.—Handbook of the Association, 1933. 2.00

Volume XXIV, 1934

The American Economic Review, **March, June, September, and December; each, 1.25

**Supplement.—Forty-sixth Annual Meeting:

Papers and Proceedings. The History of Recovery; Public Utilities in the Depression; Imperfect Competition; Fundamentals of a National Transportation Policy; Correlation of Rail and Highway Transportation; Marketing under Recovery Legislation; Economics of the Recovery Act; Measurement of Unemployment; Controlled Inflation; Banking Act of 1933—An Appraisal; Some Statistics on the Gold Situation; The Problem of Tax Delinquency; The Problem of Expanding Governmental Activities; The Economics of Public Works. Pp. 224. 1.25

Volume XXV, 1935

The American Economic Review, March, June, September, and December; each, 1.25

Supplement.—Forty-seventh Annual Meeting:

Papers and Proceedings. NRA Examined; Rate-making Problems of TVA; New Deal and the Teaching of Economics; Paths of Economic Change; Business Enterprise and the Organization of Production; Changes in the Character, Structure, and Conditions of Production; International Aspects of Problems of Production and Trade; International Movements of Capital; Our Commercial Banking System; Aspects of Co-ordination and Finance; Some Lessons Drawn from European Experience; Nationalism; Security Regulation and Speculation; Monetary Stabilization from an International

Point of View; Monetary Stabilization from a National Point of View; Decentralization of Population and Industry; Co-ordination of State and Local Finance; Relief Aspects of the New Deal; Unified Program for the Unemployed. Pp. 240. $1.25

Volume XXVI, 1936

The American Economic Review, March, June, September, and December; each, 1.25
Supplement.—Forty-eighth Annual Meeting:
Papers and Proceedings. Some Distinguishing Characteristics of the Current Recovery; Price Theories and Market Realities; Notes on Inflexible Prices; Effect of the Depression upon Earnings and Prices of Regulated and Nonregulated Industries; Size of Plants in Its Relation to Price Control and Price Flexibility; Requisites of Free Competition; Monopolistic Competition and Public Policy; Banking Act of 1935; Recent Legislation and the Banking Situation; Economic Aspects of an Integrated Social Security Program; Capital Formation; Trade Agreements Program and American Agriculture; Founding and Early History of the American Economic Association; Developments in Economic Theory; Federal Revenue Act of 1935; Relations between Federal, State, and Local Finances; Equalization of Local Government Resources; Adjustment to Instability; Transportation Problems; Fifty Years' Developments in Ideas of Human Nature and a Motivation; Institutional Economics; Place of Marginal Economics in a Collectivist System; Problem of Prices and Valuation in the Soviet System; Effects of New Deal Legislation on Industrial Relations; Report of the Fiftieth Anniversary Dinner. Pp. 350. 1.25
** Supplement No. 2.—Handbook of the Association, 1936. 2.00

Volume XXVII, 1937

The American Economic Review, March, June, September, and December; each, 1.25
Supplement.—Forty-ninth Annual Meeting:
Papers and Proceedings. Economic Interdependence, Present and Future; Quantitative and Qualitative Changes in International Trade During the Depression; Current Tendencies in Commercial Policy; Trade Problem of the Pacific; Analysis of the Nature of American Public Debts; Limits to Possible Debt Burdens, Federal, State, and Local; Debt Retirement and the Budget; United States Debt—Distribution among Holders and Present Status; Federal-State Unemployment Compensation Provisions of the Social Security Act; Unemployment Relief and Insurance; Economic Problems Arising from Social Security Taxes and Reserves; The Situation of Gold Today in Relation to World Currencies; Mechanisms and Objectives for the Control of Exchange; The Adequacy of Existing Currency Mechanisms Under Varying Circumstances; Present Situation of Inadequate Housing; Financing of Housing; Some Economic Implications of Modern Housing; Managed Currency; A Critique of Federal Personnel Policies as Applied to Professional Social Science Positions; New Opportunities for Economists and Statisticians in Federal Employment; Government Employment as a Professional Career in Economics; Indicia of Recovery; Housing and Housing Research; Distribution of Purchasing Power and Business Fluctuations; Forecast of Power Development; The Possibility of a Scientific Electrical Rate System; Co-ordination of Public and Private Power Interests in European Countries; Recent Developments in the Theory of Speculation; Control of Speculation under the Securities Exchange Act; Unorganized Speculation: the Possibility of Control. Pp. 333. 1.25

Volume XXVIII, 1938

The American Economic Review, March, June, September, and December; each, 1.25
Supplement.—Fiftieth Annual Meeting:
Papers and Proceedings. The Significance of Marxian Economics for Present-day Economic Theory; The Significance of Marxian Economics for Current Trends of Governmental Policy; The Rate of Interest; Security Markets and the Investment Process; Relation of Price Policy to Fluctuations of Investment; General Interest Theory; Rate of Interest; Security Regulation; Corporate Price Policies; Fiscal Policies; Rate of Consumption; Wage Rates; Social Security Program; Rate of Consumption; Durable Consumers Goods; Wage Policies. Pp. 192. 1.25
Supplement No. 2.—Handbook of the Association, 1938. 2.50

Volume XXIX, 1939

The American Economic Review, **March, **June, September, and December; each, $1.25

Supplement.—Fifty-first Annual Meeting:

Papers and Proceedings. Problem of Industrial Growth in a Mature Economy; Effects of Current and Prospective Technological Developments upon Capital Formation; Public Investment in the United States; Expansion and Contraction in the American Economy; Effect of Industrial and Technological Developments upon Demand for Capital; Role of Public Investment and Consumer Capital Formation; Income and Capital Formation; Price and Production Policies of Large-Scale Enterprise; Changing Distribution Channels; Financial Control of Large-Scale Enterprise; Pure Theory of Production; Changing Character of American Industrial Relations; Wages and Hours in Relation to Innovations and Capital Formation; Effect of Wage Increase upon Employment; Relation of Wage Policies and Price Policies; An Appraisal of Factors Which Stopped Short the Recovery Development in the United States; Fiscal Policy in the Business Cycle; An Appraisal of the Workability of Compensatory Devices; Divergencies in the Development of Recovery in Various Countries; Factors Making for Change in Character of Business Cycle; Industrial Relations. Pp. 280. 1.25

Volume XXX, 1940

The American Economic Review, March, June, September, and December; each, 1.25

** Supplement.—Fifty-second Annual Meeting:

Papers and Proceedings. Objectives of Monetary Policy; Economic Issues in Social Security Policy; Bank Deposits and the Business Cycle; Problems in the Teaching of Economics; Price Control Under "Fair Trade" Legislation; Problems of American Commercial Policy; Transportation Problem; Preserving Competition Versus Regulating Monopoly; Theory of International Trade; Collective Bargaining and Job Security; Banking Reform Through Supervisory Standards; Incidence of Taxation; Economic Planning; Growth of Rigidity in Business; Economics of War; Population Problems; Cost Functions and Their Relation to Imperfect Competition. Pp. 436. 1.25

Supplement No. 2.—Handbook of the Association, 1940. 2.00

No. 5 (February, 1941)

Fifty-third Annual Meeting (December, 1940):

Papers and Proceedings. Gold and the Monetary System; Economic Research; Federal Budget; Economic Consequences of Deficit Financing; Teaching of Economics; Agricultural Situation; A Review of Fundamental Factors, an Evaluation of Public Measures, and an Appraisal of Prospects; Status and Role of Private Investment in the American Economy, 1940; Unemployment in the United States, 1930-50; Economic Consequences of War Since 1790; Some Economic Problems of War, Defense, and Postwar Reconstruction; United States in the World Economy, 1940; International Economic Relations and Problems of Commercial Policy; Price Policy and Price Behavior. Pp. 458. 1.25

Volume XXXI, 1941

The American Economic Review, March, June, September, and **December; each, 1.25

Volume XXXII, 1942

The American Economic Review, **March, **June, **September, and **December; each, 1.25

**Supplement.—Fifty-fourth Annual Meeting:

Papers and Proceedings. Economic Adjustments After Wars; Problems of Taxation; Determinants of Investment Decisions; Problems of International Economic Policy for the United States; History of American Corporations; Problems of Labor Market Research; Co-ordination of Federal, State, and Local Fiscal Policy; Technical Aspects of Applying a Dismissal Wage to Defense Workers; Problems of International Economic Policy; Impact of National Defense and the War upon Public Utilities; Future of Interest Rates; Effect of Managerial Policy upon the Structure of American Business; Economic Effects of Wars; Economic Aspects of Reorganization Under the Chandler Act; Economics of Industrial Research; Objectives in Applied Land Economics Curricula; Changing Position of the Banking System and Its Implications for Monetary Policy; Determination of Wages; Economic

Problems of American Cities; Cost and Demand Functions of the Individual Firm; Problems of Price Control; Effects of the War and Defense Program upon Economic Conditions and Institutions; Trade Unions and the Law. Pp. 534. $1.25

Supplement No. 2.—Papers Relating to the Temporary National Economic Committee. Pp. 135. .50

Supplement No. 3.—Directory. Pp. 198. 3.00

Volume XXXIII, 1943

The American Economic Review, **March, June, September, and December; each, 1.25

**Supplement.—Fifty-fifth Annual Meeting:

Papers and Proceedings. Economic Claims of Government and of Private Enterprise; Our Industrial Plant When Peace Comes; Financial and Government Contract Adjustments of Industry at the End of the War; Problems of Public Policy Raised by Collective Bargaining; Our Labor Force When Peace Comes; Price Control and Rationing; Case Studies in Price Control; Restoration of International Trade; Future of International Investment; International Financial Relations After the War; Economic Regionalism and Multilateral Trade; Bases of International Economic Relations; International Commodity Agreements. Pp. 508 + 15. 1.25

Volume XXXIV, 1944

The American Economic Review, **March, June, September, and December; each, 1.25

**Supplement.—Fifty-sixth Annual Meeting:

Papers and Proceedings. Political Science, Political Economy, and Values; Educational Function of Economists and Political Scientists; Public Administration of Transportation under War Conditions; How Achieve Full and Stable Employment; Incentive Problems in Regulated Capitalism; Postwar Labor Problems; Social Security; Postwar Legal and Economic Position of American Women; Postwar Domestic Monetary Problems; Economic Organization of Welfare; International Trade; Regional Problems; International Monetary Problems. Pp. 440 + 16. 1.25

Supplement No. 2.—Implemental Aspects of Public Finance. Pp. 138. 1.00

Volume XXXV, 1945

The American Economic Review, March, June, September, and December; each, 1.25

Supplement (May).—Fifty-seventh Annual Meeting:

Papers and Proceedings. Consumption Economics; Expanding Civilian Production and Employment After the War; Natural Resources and International Policy; Interdepartmental Courses in the Social Sciences; Price Control and Rationing in the War-Peace Transition; Organized Labor and the Public Interest; Aviation in the Postwar World; International Monetary and Credit Arrangements; Agricultural Price Supports and Their Consequences; Political Economy of International Cartels; Fiscal Problems of Transition and Peace; Problems of Regionalism in the United States; Food and Agriculture—Outlook and Policy; Function of Government in the Postwar American Economy. Pp. 520 + 16. 1.25

Volume XXXVI, 1946

The American Economic Review, March, June, September, and December; each, 1.25

Supplement (May).—Fifty-eighth Annual Meeting:

Papers and Proceedings. Problem of "Full Employment"; American Economy in the Interwar Period; Postwar Labor Relations; Monetary Policy; Changing Structure of the American Economy; Economic Problems of Foreign Areas; Publication of an Annual Review of Economics; New Frontiers in Economic Thought; Postwar Shipping Policy; Monopoly and Competition; Postwar Tax Policy; Postwar Railroad Problems; International Investment; Recent Developments in Public Utility Regulation; International Cartels; Economic Research; Methods of Focusing Economic Opinion on Questions of Public Policy (e.g., Monetary, Agricultural Price Supports); Undergraduate Teaching of Economics. Pp. 950. 1.25

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